

AUSCRIPT AUSTRALASIA PTY LIMITED

ACN 110 028 825

T: 1800 AUSCRIPT (1800 287 274) E: <u>clientservices@auscript.com.au</u>

W: www.auscript.com.au

TRANSCRIPT OF PROCEEDINGS

O/N H-910737

MR B. WALKER SC, Royal Commissioner

IN THE MATTER OF THE MURRAY-DARLING BASIN ROYAL COMMISSION

ADELAIDE

9.06 AM, THURSDAY, 19 JULY 2018

Continued from 18.7.18

DAY 11

MR R. BEASLEY SC, Senior Counsel Assisting, appears with MR S. O'FLAHERTY, Junior Counsel Assisting

MR BEASLEY: Yes. Sorry, Mr Whan. Have a seat again.

<STEPHEN JAMES ROBERT WHAN, ON FORMER AFFIRMATION [9.06 am]

< EXAMINATION-IN-CHIEF BY MR BEASLEY

10 THE COMMISSIONER: Good morning Mr Whan. Sorry about the delay.

MR WHAN: That's all right.

THE COMMISSIONER: Thank you.

15

40

45

5

MR WHAN: No problems.

MR BEASLEY: Yesterday – I just wanted to ask you about a couple of clarifying matters about some of the evidence you gave yesterday to make sure I understand it.

In the course of a question, the Commissioner asked you a question, "How does one horse trade to an environmentally sustainable level of take?" And you said there was a figure determined by the Basin Plan Authority; you weren't involved in the negotiations but "we live in a democracy".

- I take it that's a reference to the states perhaps the eastern states and South Australia having a disagreement about the amount of water that should be recovered for the environment, rather than a reference to the requirements of the Water Act, which is everything has got to be based on the best available science.
- MR WHAN: I would say the at the time and probably Tony Burke would be the one who has the most direct knowledge of this, as an observer at the time that the Basin Plan was being developed, it was clear that there was a lot of negotiation between the states over what the final outcome in terms of particularly the up and the down water would be and I'm not sure what the extent of negotiation what
- 35 there was on the figure.

The – but the figure of 2,750 was one which was – which was publicly presented and then there was movement around that. And that was part of the democratic process, as I would see it. We elect governments to make key decisions, and they attempted to come up with an agreement which would be satisfactory to all the parties. Now, how that relates to the process of the MDBA coming up with the 2,750 figure, I was not involved in that process but the figure that was there, 2,750 plus 450 is one which has been – you know, is – from the point of view of – from the point of view of the participants in the Plan – the people who are in the communities – is a figure which is now accepted as being that – the Basin Plan's recovery targets and they would

certainly see any change to that as being something which broke the trust that has been developed there.

MR BEASLEY: Sure. My only point was you're – you don't want to be heard to be saying there's some connection between a party-to-party or state-to-state negotiation and a link to any statutory requirement that the Basin Plan has to be based on the best available science. These are different processes?

MR WHAN: Well, yes. Look, I was not involved in those processes.

10

MR BEASLEY: Sure, all right.

MR WHAN: So I certainly couldn't make a judgment on them.

MR BEASLEY: Just picking up on what you – the last bit of your answer there and what you said yesterday about – I think I was putting to you issues about whether 2,750 truly represented an environmentally sustainable level of take and you gave an answer along the lines that if the Basin Plan is, through some legal process, declared invalid, that won't do the environment any good and you said that the best chance of achieving environmentally positive outcomes for the river system is to implement the Basin Plan as it stands.

I understand why you are saying that, but can I – could I suggest to you, though, that if we assume – and please make this assumption and there's obviously – I don't make findings here, so this is only an assumption I'm asking you to make for the purposes of my question – but if 2,750 recovery of water for the environment does not result in a sustainable diversion limit that reflects an environmentally sustainable level of take properly understood, and is therefore not consistent with the statute, why, if that figure had to be increased, would that be – not be a positive outcome for the environment? It might come with some consequences economically, I understand that, but why would that not – why would not – that not be a positive outcome for the environment if the figure had to be increased to be consistent with the statute?

35 MR WHAN: Well, I think, firstly, it's a hypothetical question.

MR BEASLEY: Sure, it is.

MR WHAN: I certainly wouldn't assume that the current figure is not satisfactory.

And as I've said in the submission and a number of scientists have said, that it will take potentially decades to see whether the full environmental results come through. So the question of judgment about whether the Basin Plan has delivered for the environment I think is one we won't be able to make in 2024; it's one that will take some considerable years after that. But we are seeing positives.

45

Now, I've certainly spoken to scientists who are telling me that they are seeing those positive results. I did a quick Google before I came – found 16 scientists who had

been – made public comment over recent months positively about the Basin Plan. The – the real question about this is that Basin Plan – you can't divorce the democratic process about the Basin Plan overall.

- The plan has to be passed by the Parliament. The Parliament would quite properly take into account impacts on communities and if you would reduce this and so should I think anybody designing the Basin Plan, as I believe the objectives make it clear it is intended to do, the impact of - -
- MR BEASLEY: Just stopping you there, sorry. It needs to be passed by Parliament. That's that may be perfectly correct but it has to be passed or it should be passed in a lawful fashion.

MR WHAN: I believe it has been. My - - -

15

THE COMMISSIONER: Could we get our terms precise?

MR BEASLEY: Yes.

20 MR WHAN: Yes.

THE COMMISSIONER: What do you mean – when you were a parliamentarian, what do you mean when you say the plan has to be passed?

MR WHAN: I take the plan as being the whole package, including amounts of water. So this – the Basin Plan document which includes the SDLs.

THE COMMISSIONER: What do you mean when you say the Plan, including has to be passed by Parliament?

30

MR WHAN: Okay. Not disallowed.

THE COMMISSIONER: By one of the Houses of Parliament.

35 MR WHAN: Yes, correct.

THE COMMISSIONER: You're very familiar with the process.

MR WHAN: Yes. And - - -

40

THE COMMISSIONER: The distinction between enacting legislation - - -

MR WHAN: Yes.

45 THE COMMISSIONER: --- and the control that a democratic chamber, one of the chambers can exercise by a disallowance motion over delegated legislation. You understand the difference.

MR WHAN: Yes, absolutely.

THE COMMISSIONER: You also understand, don't you, that delegation has to be in accordance with the authorising statute.

5

MR WHAN: Yes, and I believe – and I have no reason to believe it is not currently. So that's not a - I'm not going to stress any other opinion on it than that.

MR BEASLEY: I'm not asking you to.

10

MR WHAN: And the - - -

THE COMMISSIONER: We wouldn't - - -

15 MR BEASLEY: I asked you to make an assumption.

THE COMMISSIONER: We wouldn't waste your time asking you about that.

MR WHAN: Now, when I talk about passed by the Parliament – yes, it is true. My

- when I'm talking in the media to a less-learned audience it is very hard to go with
the various double negatives of disallowance and things like that.

MR BEASLEY: No, that's fair enough.

- 25 MR WHAN: So I've tended to be I've tended go with "approved by" or "passed by" Parliament in my public comments, but please take that to mean that I do understand that disallowance is by a single house.
- THE COMMISSIONER: It is not a subtle difference for this reason: Something that is within the grasp of Parliament to "pass", in the ordinary sense of that word, will of course be the law. Whatever it says is the law.

MR WHAN: Yes. And - - -

35 THE COMMISSIONER: As you correctly say, the democratic process and then our value of the rule of law means that will be obeyed until Parliament changes its mind.

MR WHAN: Yes.

- 40 THE COMMISSIONER: Now, delegated legislation, however, which may be disallowed by the vote in one of the chambers delegated legislation, on the other hand, is different. It has to comply with its authorising legislation.
- MR WHAN: Yes. And if you if the Commission wishes to argue that the current Plan does not, that's up to it. But I wouldn't.

MR BEASLEY: I don't think the Commissioner is arguing that.

THE COMMISSIONER: I think you might like to reconsider what you've just said. What do you mean if the Commission is - - -

MR WHAN: If the Commission makes a finding – as I've heard some of the media comments. Now, I'm not going to make a judgment on that. My view - - -

THE COMMISSIONER: I'm not asking you that. May I make this crystal clear, because I don't appreciate things being attributed to me which is not my position. I've yet to make my report.

10

MR WHAN: Okay. My apologies. The discussion paper implied certain things.

THE COMMISSIONER: Apology accepted. The next thing is this. This is emphatically not a court.

15

MR WHAN: Yes. I'm aware of that.

THE COMMISSIONER: Good.

20 MR WHAN: Yes. And - - -

MR BEASLEY: I think, don't confuse my line of questioning, where I'm entitled to have a theory - - -

25 MR WHAN: Yes.

MR BEASLEY: --- with anything the Commissioner is thinking or going to decide.

30 MR WHAN: No – Commissioner, yes, I appreciate that.

MR BEASLEY: And I think the issues paper you are referring to did also expressly say "this is not a final view, these are matters I'm concerned about".

35 MR WHAN: Yes, I take that on board and I apologise for any inference, Commissioner.

MR BEASLEY: All right. That's all right. Yes.

- 40 MR WHAN: The point I'm the point I would like to make about it, though, is that is that and, going back to your original question, if at some future stage if at 2024 or some future stage, there was a decision made which said that more water needs to be recovered for the environment, that would have a significant negative impact on communities.
- 45

It has, for instance, if the – if the 605 gigalitres had not been upheld by Parliament – if that's a better way of putting it, that – in South Australia, for example, that would

have had the impact of effectively removing the amount of water used in the Barossa and Loxton irrigation schemes together.

THE COMMISSIONER: That's your reference to the 40 gigalitres.

5

MR WHAN: That's to the amount that would have to be removed there.

MR BEASLEY: I think, with - - -

10 MR WHAN: So - - -

MR BEASLEY: Hang on, with respect, I just think you are straying from the question I asked you, which was a lot simpler, which was simply this: I'm not asking you to agree that 2,750 ask or isn't – as a recovery of water from the environment results in an SDL that reflects an ESLT. I'm only asking you, for the purpose of my question, just make the assumption that 2,750 – and there are reports by the – two reports by the CSIRO that says 2,800 will not meet the environmental watering requirements set by the Basin Authority itself.

The assumption I'm asking you to make is if 2,750 gigalitres recovery of water for the environment does not result an SDL that reflects an ESLT as properly – as that term is properly construed under the statute, then increasing the amount of water to get to an ESLT can't possibly not have a positive outcome for the environment, can it?

25

30

15

MR WHAN: I don't – look, I wouldn't accept that the – that – the – when the legislation was originally put in place, the Minister made it clear that the – excuse me – that the MDBA was to have regard to the work that was done by CSIRO and the work on economic and social – those things have to be balanced. I'm not in a position to make a judgment on whether or not the current amounts are, in the long term, going to be enough. Certainly - - -

MR BEASLEY: I don't mean this rudely, but I think you are evading the question.

35 MR WHAN: Look, I don't think it's within – you know, I'm here as a representative of the National Irrigators' Council.

MR BEASLEY: Sure.

40 MR WHAN: And I've – and I've made it very clear - - -

MR BEASLEY: You've put in a submission that makes comments about, "Things will result in positive environmental benefits."

45 MR WHAN: Yes.

MR BEASLEY: All of those things. You are entitled to be asked questions about them.

MR WHAN: Yes. Yes, and - - -

5

MR BEASLEY: My question is really simple. If 2,750 doesn't result in an SDL that reflects an ESLT properly understood in the statute, then if that figure has to go up for more water for the environment, that can't possibly not result in positive outcomes for the environment, can it?

10

MR WHAN: Firstly, I – firstly, your "if" at the start is a big assumption. So I don't accept that assumption.

MR BEASLEY: I'm not - - -

15

20

25

MR WHAN: However, yes, there would be – if you – if you simply improved – if you simply increased the amount of water flowing down the river, some environmental indicators would be better. We could contend that many others would be improved by complimentary measures. So that goes back to the point that I've made on a number of occasions which is flow is not the only solution for the environment.

MR BEASLEY: No, and that may be right, but the entirety of the MDBA's modelling is based on what ecological benefits you will get from certain amounts of flow at certain times of the year, at certain rates, at certain - - -

MR WHAN: Yes.

MR BEASLEY: --- percentages of years. That's how the – that's how the process has been done and ---

MR WHAN: Yes. And we have consistently said that we felt that was a too limited way of judging environmental impact.

MR BEASLEY: It may be but that's the modelling and I'm not sure the Commission is going to unpick the modelling.

THE COMMISSIONER: I thought, in fact, your submission was that we shouldn't assume the – probably hopeless task of trying to make our own model.

40

MR WHAN: I think you are probably right.

THE COMMISSIONER: Well, you said that in your submissions.

MR WHAN: Yes, I do, absolutely. But, however, I think I – I think we have made it clear we feel the flow indicators are not the best measures. Now, when we

measure in the long term environmental outcomes we would like to see actual -a measure of outcomes rather than flows, particularly --

THE COMMISSIONER: Just so I get the terminology correct so I understand your submission. You are aware, aren't you, of something called "environmental watering requirements" as a conceptual device partly reflected in the appendices to the Basin Plan itself by which it was attempted to ascertain the SDLs – the sustainable diversion limits. You're aware of that? And you're aware that they're expressed in terms which, in many cases, refer or derive from flow but, I think, in all cases, refer to some biological or environmental outcome?

MR WHAN: Yes.

THE COMMISSIONER: Yes.

15

MR WHAN: Yes, but they are linked to flow. I think there is scope for being positive about some of this, because when the environmental water holder, for example, measures their outcomes they will be measuring a broader set of outcomes, we would hope.

20

25

THE COMMISSIONER: Well, I think – that's what I said yesterday. You are pushing an open door there. It never occurred to me that you could simply, as it were, do a plumbing exercise, work out the flow and say. "There's a big tick". As I think you have pointed out a couple of times, the actual quality of the water may mean that, in some cases, increased flow will mean devastation for the environment.

MR WHAN: Yes. And I think you have already heard the argument about, for instance, cold water pollution and - - -

30 THE COMMISSIONER: Yes. Quite.

MR WHAN: --- so on. So those things are very important and we talk hypothetically about increased flows and impacts on the environment. We would strongly say that we need to look first at the complimentary measures.

35

40

45

moment.

MR BEASLEY: I want to also make sure I understand an answer you gave to one of the Commissioner's questions yesterday where – I think I put this to you as well, but I'm reading from a question from the Commissioner, which was relaying to you, in part of the question, that the broad concern amongst Australia's scientific community – one of the concerns – is that we don't know whether 2,750 for the environment is part of an environmentally sustainable level of take because we can't test it and in the course of your answer, you said you certainly believed in maximum transparency, but you disagreed that the scientific consensus is necessarily the way that the Commissioner suggested. By no means do you have to do this because we're asking you for a favour, but given you've engaged in the issue – I think I said yesterday, we – obviously, you know no one from the MDBA is coming here at the

MR WHAN: Yes.

MR BEASLEY: There's some CSIRO reports and some of the former employees of the CSIRO have come here and given evidence certainly suggesting that 2,800 gigalitres doesn't mean environmental watering targets that the Basin Authority set for itself. Another former CSIRO scientist came here and gave evidence and said the MDBA put in proper pressure on the CSIRO to censor a report and change a report such that it didn't reflect the actual CSIRO results and we had another scientist give evidence the day before yesterday who said that if it's necessary to meet the environmental watering requirements of – that were set by the Basin Authority for key environmental assets and key ecosystem functions, then 2,800 is not – does not result in an SDL that reflects an environmentally sustainable level of take.

When you say that the scientific consensus – you don't agree, is the way the

Commissioner put it. Outside of people at the MDBA, does the National Irrigators'
Council have access to any scientists of repute in that the people that have been called here are highly reputable scientists? People I've mentioned have been in charge of water for CSIRO for long periods of time. Do you have the name of any scientist that can come here and tell us, "I do understand what the MDBA has done

and it does reflect an ESLT"?

MR WHAN: I've - - -

MR BEASLEY: Or are you just relying on the MDBA?

25

MR WHAN: Well, two parts to that. Firstly, I do have a-I am aware of a number of scientists who are much more positive about the Plan than perhaps the ones you've had, and I'm happy to provide some - - -

30 MR BEASLEY: I should have given you – all of - - -

THE COMMISSIONER: Could we just focus this - - -

MR WHAN: I'm happy to provide some information on those.

35

THE COMMISSIONER: Positivity about the Plan is not what the question is about.

MR WHAN: Yes, look, I can't speak for them as to whether or not they would be able to tell you the detail of how the 2,750 or - - -

40

MR BEASLEY: Right. All right.

MR WHAN: --- 3,200 figure, that would be something you would need to ask them. The ---

45

MR BEASLEY: I should have given you the context.

MR WHAN: It is - - -

MR BEASLEY: I don't think anyone who is a scientist has come here, has said the Plan isn't a good thing.

5

MR WHAN: Yes. I – and

MR BEASLEY: They're concerned about implementation.

MR WHAN: And I understand that. I think some people who have come have a – when I talk – when I talk about the Plan, I talk about including those figures.

MR BEASLEY: Yes.

MR WHAN: Some of them, I think, differentiate that and say the Plan is a good thing if it had the figures that I felt were more appropriate in it, and that's – and I – and that's where I would differ from them. But in terms of scientists, I'm happy to provide some names. It is disappointing that you only heard from people who are its critics as to that process. That unfortunately wasn't my decision as to who might be

20 ---

MR BEASLEY: It wasn't my decision either.

MR WHAN: It wasn't yours either.

25

MR BEASLEY: No.

MR WHAN: But if it assists, I'm happy to provide some names of people who I have come across.

30

MR BEASLEY: Well, that would be – we would be grateful for that.

THE COMMISSIONER: Well, that would be very – that would be very good of you. Thank you.

35

40

MR BEASLEY: We touched yesterday on the issue of transparency about the sustainable – SDL adjustment mechanism and the various supply measures. And I think quite properly you – your evidence was that you do believe in full transparency. And I think I put to you that that would be in order for you to fulfil your role, for your members, transparency is important because you want to have confidence in advising that 605 gigalitres is going to be achievable and isn't a figure that's going to be altered in six years' time, because that may have some implications for them if – well, if for example, more water has to be recovered in six years time.

45 MR WHAN: It certainly does.

MR BEASLEY: I just want to quickly read to you from some of the MDBA's analysis of some of these supply measures. I think I mentioned yesterday Menindee Lakes - - -

5 THE COMMISSIONER: Menindee.

MR BEASLEY: Thank you. I will get it right one day. I get it right sometimes. The Lakes' supply measure. The MDBA's analysis that it – this project puts at risk, I think in total, something like 23,000 hectares of golden perch habitat and we can't really assess that without an EIS. That was material that was only made publicly available through a compulsive process in the Senate. Equally, the MDBA's analysis of the Murrumbidgee Bridge River, Yanco Creek supply measure says this:

Yanco Creek has significant environmental including the populations of endangered cod and trout cod remaining areas of permanent flow. There is a risk that the changed operating regime will result in adverse environmental outcomes. It is not yet clear that these risks have been comprehensively assessed or how they will be managed.

20 The Murray National Parks supply measure:

There is the potential for extra salt mobilisation and increased risk to salinity impact. Water quality and salinity risks have not been addressed in this proposal.

25

30

10

15

Murrumbidgee Effluent Creek supply measure:

The MDBA has concerns that the proposal does not, at least in its current form, meet the requirements of the supply measure which must achieve equivalent environmental outcomes to the benchmark environmental outcomes. Modelling of the hydrological metrics of the –

sorry:

- Modelling of the proposed watering regime completed to date does not maintain the achievement of hydrologic metrics in the benchmark model and could in principle be considered to not meet the requirements under the Basin Plan section 7.15.
- I assume they are the sort of matters that you would consider, given your views of transparency, the MDBA really should have made publicly available at an early stage certainly before the Senate disallowance motion so our parliamentary representatives engaging in the process of democracy would have known would have known those things?

45

MR WHAN: I would like to have seen a lot more information about the projects there, but from the point of view of the National Irrigators' Council it was absolutely critical that we get a figure passed – sorry, not disallowed by the Senate. Now - - -

5 MR BEASLEY: Just pausing on that. I know you say it is critical that you get a figure passed by the Senate.

MR WHAN: We only had one chance of that, that's why.

MR BEASLEY: Well, but – isn't – it's also important that you – you know, so that you can tell your members, "Look, there might be some real concerns about this 605 gigalitres." There's some alarming – I will take the word alarming out. "There is some commentary by the MDBA in their analysis there are real environmental risks in relation to that. These measures require environmental equivalency."

15

MR WHAN: Well, I - - -

MR BEASLEY: "Let's not count on 605 gigalitres in six years."

MR WHAN: I think it's entirely appropriate that the MDBA is highlighting the questions that need to be answered in the process.

THE COMMISSIONER: They haven't highlighted; it's had to be dragged out of them.

25

MR WHAN: Yes. Although, Menindee Lakes has actually had quite a lot of work around about it since the government I was a part of, in New South Wales, was commissioned by the Federal Government to do those initial studies. So there has been quite a lot of that around.

30

MR BEASLEY: Actually, there are studies that have been given to us back in 1994 alerting to the danger of the perch.

MR WHAN: Well and truly predates me. But – and that is – you know, there is – I do believe there is a number of issues that need to be resolved there. I would have thought that project for example, it's – you know, the operational rule should be able to deal with low flows, for example. But yes, there is a lot of questions to be answered and when I spoke to my members about these projects, I – I also said there is a lot of information we need about these projects.

40

MR BEASLEY: Sure.

MR WHAN: But we need to get behind the process of actually getting a figure, because our alternative in process was, if that was disallowed, that the recovery of 605 had to proceed. And that had a serious economic impact. So from there we had a very black and white decision in that process. Achieve that - - -

MR BEASLEY: I – sorry, yes, go ahead.

MR WHAN: Achieve that, or achieve zero. And recovery. From there we know that there is a very detailed process that needs to happen.

5

10

15

MR BEASLEY: Yes.

MR WHAN: We are involved in the working group with the MDBA at the moment which will be regularly reporting on the measures as they go through and we would expect to be seeing how those issues have been dealt with.

MR BEASLEY: I think the answer you have just given, you have probably already answered this question, but I will give you the opportunity to say what you want about it. There's obviously – let's forget legality for the moment and I want to raise this as a policy issue. There's obviously, in relation to this SDL adjustment mechanism, if we leave the requirements of the law aside for one moment, there's a policy decision about do you put the supply measures in place, wait until they are implemented, whenever that may be – it has to be at least by, I think June 2024, see how they go and then make any volume of water adjustment to the Plan.

20

25

30

Or do you, as what's happened, make the adjustment of water – adjustment at the time the Water Resource Plan has come in on 1 July next year, even when the supply measures may – many of them won't be up and running at the time, and then reconcile later in 2024. I'm pretty confident that you're going to say that's the better approach, but do you want to explain why for the purposes of your members?

MR WHAN: Yes. Well, look, I think the obvious reason why is the economic impact that removing the water in advance would have. Now, you would have several – several aspects to that. Firstly, there would be large quantities of water lost in some fairly critical irrigation areas. And when I say lost, obviously not lost, lost to economic production.

MR BEASLEY: Yes.

35 MR WHAN: I certainly recognise it is still in the river, as is – two-thirds of the water is never extracted.

MR BEASLEY: Yes.

40 MR WHAN: The – so the impact of that has a couple of serious problems. It causes a couple of serious problems. Firstly, you are reducing the capacity to produce. We have a water market, so you would be pushing the water price up extremely high and you would see some fairly severe dislocation occur because of that, particularly in areas where the terms of trade aren't particularly favourable.

45

MR BEASLEY: So the price of temporary water would go up, is that what - - -

MR WHAN: The price of – the price of your permanent – assuming that, in advance, you are actually getting a permanent entitlement.

MR BEASLEY: Yes.

5

MR WHAN: That price would sky rocket again. It has already gone quite high.

MR BEASLEY: Yes.

- MR WHAN: If in a dry spell temporary water would become particularly higher security temporary water would become extremely expensive. You would probably see a very serious impact on sectors like dairy. You would see quite a few permanent plantings also go and if you were to say, "Well, let's do that."
- 15 MR BEASLEY: Go because they couldn't be kept alive or - -

MR WHAN: Yes, because they couldn't be kept alive.

THE COMMISSIONER: So when you call – when you say the temporary water will become very expensive, first of all I agree. All indicators are that. But, of course, there is a buyer and a seller.

MR WHAN: There's a - - -

- 25 THE COMMISSIONER: A buyer and a seller so the seller makes a lot of money. MR WHAN: The seller makes a lot of money, that's true. That's for that individual or company that owns the water that's that may be economically beneficial for them.
- 30 THE COMMISSIONER: For the person who decides, "Do I wish to irrigate a crop or sell the water?"

MR WHAN: For the overall irrigation industry in Australia's capacity to produce food and fibre, it would be a negative, and I think that's – so that's part of the reason.

- The second the second aspect to why you wouldn't want to actually recover the water in advance, and then give it back later on, is that as I said yesterday it's really important that these projects do have engagement and support of communities as they work through. If you were to take the water away in advance, I think you would find that hostility people would say, "Well look, you know, you just keep kicking
- us." And, you know, I know this is not a terribly scientific or legal way to go about it, but that but community attitudes would be very hostile and it would make it very difficult to put these in place.
- So the other aspect to that is of course which is which is able to be estranged is the Commonwealth is not currently able to actually resell permanent entitlement back to the market. So obviously that's a legislative change which could be made, but and it is something which probably will have to be dealt with at some stage, as they are

able to trade water, but not trade permanent – not sell a permanent entitlement, as I understand it at the moment. So it would have to be a – I think the idea that you would find – look, to be – I suppose to be blunt about it, it would be very controversial if you got to 2024 and said, "Right, we have achieved this, therefore the government is going to allow a quantity of to go back into the commercial market."

I think that would be quite a difficult thing for environmental groups to accept as well. So the process which is outlined at the moment of taking the 605 off is, I think, the most practical and best way to go about it. Obviously, in reference to our discussion before, we would hope they haven't been overly optimistic in it, in the thing, but we have to take it on faith - - -

MR BEASLEY: Because they're - the - - -

15 THE COMMISSIONER: Now, can I just ask – could I just ask you about that. If they have been overly optimistic, the reconciliation presently slated for 2024 appears to require – and it depends upon something that is statutory interpretation, but it appears to require under 7.11 of the plan for the figures to be altered. You understand that, obviously?

MR WHAN: Yes, yes.

5

10

20

40

THE COMMISSIONER: And if I have understood your last answers correctly, and please tell me if I haven't, you are pointing out that two of the choices, as a matter of 25 policy, were these: first, to undertake these measures and wait until, by their own lights, they have been accomplished to see whether they produce the equivalent environmental outcomes. And only then – and if they did – to lower the – to increase the water available for irrigation by altering the SDL. The other policy choice, which appears to be the one that governs, is to consider the measures as proposals 30 and before their accomplishment to make an assessment in light of the information available and to the extent the Authority thinks it can make the assessment, and determine in advance what adjustment to the SDL could flow – excuse the language – if the environmental outcomes were assessed as being equivalent, and then to make in available there and then to the irrigation community. Those are the two policy 35 choices you are referring to, I think?

MR WHAN: Yes. The – yes. When - - -

THE COMMISSIONER: And I - - -

MR WHAN: When you say "make available to irrigation community", it needs to be understood that that water has not been recovered so it's actually not – rather than not making it available, it is saying – it's really not taking it away.

45 THE COMMISSIONER: I understand that. The expression used in the plan is the "unadjusted SDL". If the SDL is not adjusted it sets a limit on consumptive use by irrigators; correct?

MR WHAN: Yes.

THE COMMISSIONER: And - - -

5 MR WHAN: Or by all users. Yes.

THE COMMISSIONER: But - - -

MR WHAN: Yes – but yes.

10

THE COMMISSIONER: Well, I'm talking about for the irrigators. And the whole of the Act and the Plan is premised on the notion that the baseline level of take is too great and must be reduced to the so-called sustainable diversion limit. You understand that, don't you?

15

20

30

MR WHAN: Yes.

THE COMMISSIONER: Now, I think it's clear, and with great respect you've made it clear in a number of your submissions, including to me, that the purposes and objects of the Act definitely include what I'm going to call morale in the farming community. Irrigation farming community, by which I mean that has to be one of the social outcomes that is required to be optimised. It's obviously relevant to the economy because morale affects willingness to invest.

25 MR WHAN: Confidence.

THE COMMISSIONER: Confidence – confidence is, I think, the word that business advisers would certainly – and economists would say is very important. Now, is it as true in the irrigation industry to your knowledge, or belief, as I think it is in many others, that confidence includes projections into a future in which you hope to continue investing and you hope for a profit?

MR WHAN: Yes, yes.

35 THE COMMISSIONER: So it's not just permanent plantings that require irrigators to look beyond the current seasons.

MR WHAN: That's true. And confidence – of course, there is still an element of uncertainty in the implementation of the Basin Plan, around the delivery of projects and around the 450. But it's – it's preferable to the uncertainty that would come if there was to be a major change.

THE COMMISSIONER: Well, you obviously appreciate why I'm interested in this. Clearly enough farming has – is dominated by uncertainty, not - - -

45

40

MR WHAN: Yes.

THE COMMISSIONER: --- least of which is the variability of the weather, as well as the change in climate. You accept that?

MR WHAN: Yes.

5

THE COMMISSIONER: And I've always appreciated, perhaps until now, that one of the points of irrigation as a civilising force is that it – it enables some control over those inevitable uncertainties in relation to the water necessary to grow plants.

10 MR WHAN: Yes.

THE COMMISSIONER: Well, now, 2024 is not all that far off. That is, it's not beyond a horizon for those thinking about capital investment on a farm, is it?

15 MR WHAN: No, it's not.

THE COMMISSIONER: And yet it's clear, isn't it, to demonstration – that is it's clear beyond the possibility of the argument to the contrary that, unless there is a change to the plan, that in 2024 apparently – according to a note in the official print of the plan – expected so as to be able to come into effect by 30 June of 2024, the Authority will have considered under this rather euphemistic expression "reconciliation", that they have to consider whether to adjust by altering the SDL.

MR WHAN: Yes, correct.

25

20

THE COMMISSIONER: That is in itself already a very important systemic uncertainty for irrigators and their lenders, is it not?

MR WHAN: Yes, to an extent. It's more – it's an uncertainty for communities. As you correctly pointed out before, if there was water to be recovered it comes from willing sellers. So – so there was – prices would be fairly high. So I don't – I'm not seeing any evidence that the – that the process of leading to 2024 and reconciliation on the 605 is leading currently to uncertainty for investment in the industry. So it appears to be something which people have taken into account.

35

THE COMMISSIONER: You gauge in general terms – and I know this is an approximation – you gauge, do you, that there is sufficient confidence in the 605 surviving, or even increasing in 2024, not to have affected the relevant market indicators?

40

45

MR WHAN: Sufficient confidence that, yes, that the 605 – look, I don't know that anybody could say it will end up being at 605, but there is certainly – I'm not seeing, as I said, any evidence of lack of investment currently, which – which would be caused if you were seeing a fundamental change to the way the plan was being implemented. The – interesting you mention potentially 605 going over. My understanding is that they couldn't adjust it above, but potentially someone might be able to carry –if there was over-recovery, if the equivalents were over the amounts,

maybe there's some way of – some of them being eligible for the upwater, but given that's got to be held water that's difficult as well.

THE COMMISSIONER: Well, it's – 7.11 is agnostic as to whether it goes up or down.

MR WHAN: Well, look, I will be very pleasantly surprised if it went in the favour of irrigators, but I would – I certainly would not be expecting that to happen.

10 THE COMMISSIONER: Well, there can be additional efficiency measures, you see.

MR WHAN: Yes.

15 THE COMMISSIONER: After those originally timetabled for 2017. Things can happen in the interim.

MR WHAN: And I think, you know, broadly outside of this, I don't think you would ever say that the job of efficiency in irrigation would stop anyway.

THE COMMISSIONER: Right. Well, now - - -

MR WHAN: It just might not be tied to a Basin Plan, for example.

THE COMMISSIONER: You've told Mr Beasley that, in effect, you are not comfortable with some hypotheticals. But isn't the whole exercise of understanding levels of certainty or uncertainty for you as a irrigator – doesn't it involve exploring the hypotheticals of what might happen, one way or the other, in 2024? Isn't that part of your job?

30

MR WHAN: To an extent, yes. Look – but just to say – you know, the – the two – the choices that we had are there's clearly – there was one direction which is clearly preferable for our members - - -

35 THE COMMISSIONER: That's what I understand.

MR WHAN: And so that's the way we took down. That doesn't mean to say the process was perfect.

40 THE COMMISSIONER: No. I'm looking to 2024.

MR WHAN: 2024, certainly. In terms of our – what we will be doing on a practical sense is – is engaging with the governments and who we have got to deliver the projects and with the MDBA, and urging our members and the communities that

they're part of to engage to make these projects a success. So I probably as – as you know, the hypothetical about whether or not they will be reached, I think, is just – is too early to make any assumptions about.

THE COMMISSIONER: Well, now, that's the next comment I wanted to ask you about. Today again you used the expression "decades", and we all know that 2024 is not a decade away. Does that mean that for you it is a criticism of the Plan that the reconciliation date is too early?

5

10

MR WHAN: No, not necessarily in that case. There is aspects of the process which I think – I do think some of the dates are too early, in other aspects I think there would be a better chance – and this is a personal view, I have to say – a better chance of success in getting the 450 upwater if there was a process that allowed that to continue for a bit longer.

THE COMMISSIONER: In your submission at page 19, at the end of section 12 you say this:

2024 needs to mark successful implementation of the Basin Plan and a period of certainty in water regulation, not the start of a new process.

MR WHAN: Yes.

- THE COMMISSIONER: By that, should I understand it that you see 2024, the reconciliation required under 7.11, as being a point when you expect not just hope, but you expect that the Authority will be in a position to see whether the requisite equivalent environmental outcomes have been achieved?
- 25 MR WHAN: On the 605, yes.

THE COMMISSIONER: Thank you.

MR WHAN: When I – can I just - - -

30

THE COMMISSIONER: I'm sorry. Just let me - - -

MR WHAN: --- explain that statement. Yes.

35 THE COMMISSIONER: I'm just trying to understand.

MR BEASLEY: They will have to have been implemented by - - -

THE COMMISSIONER: I just want to understand your submission in that case.

When you have repeated language that's political – I'm not going to say none the worse for that. I'm going to ask you about it. On page 8.

MR WHAN: Yes.

THE COMMISSIONER: You note the commitment of your organisation to the implementation of the Basin Plan "in full and on time". Does the "on time" refer to 2024 or some other time?

MR WHAN: It refers to the plan as a whole, and the timeframes in it.

THE COMMISSIONER: Yes. What time does it – what time does it – what time does it refer to?

5

10

MR WHAN: It does actually currently refer to 2024. And - - -

THE COMMISSIONER: Thank you. The implementation of the Basin Plan and the expression "on time" is that the same as the successful implementation of the Basin Plan that you refer to on page 19?

MR WHAN: When I – on page 19, what I'm referring to there is that as of – essentially, is saying that the Basin Plan needs to be allowed to settle – settle in and prove its worth environmentally over a period of time after 2024.

15

20

THE COMMISSIONER: I'm just trying to find out what you mean by time. Question 12, to which you're responding on page 19, is whether – and this is my terms of reference – whether the Basin Plan in its current form, its implementation and any proposed amendments to the plan are adequate, etcetera. And in your answer you say:

2024 needs to mark successful implementation of the Basin Plan.

And I think you have told me this morning that means you expect the Authority will then be able to see that the requisite equivalent environmental outcomes have been achieved.

MR WHAN: Yes. Referring to the 605, but that statement in my submission - - -

THE COMMISSIONER: For the SDL adjustment. That's what I mean. Thank you.

MR WHAN: But that statement that I'm making there is broader that than that, and what I'm suggesting 2024 – and to be quite blunt we shouldn't be saying, "Right, that Basin Plan is done, let's start negotiating a Basin Plan which actually – which actually seeks to recover a lot more water."

THE COMMISSIONER: I understand. Right.

40 MR BEASLEY: On time could also, tell me if I'm wrong, but on time might refer to the date of 1 July '19 when the Water Resource Plans are meant to be accredited as well; correct?

MR WHAN: Look. In full and on time has become a bit of a statement.

45

35

MR BEASLEY: I'm getting it tattooed on my arm, as long as triple bottom line is on the other one.

MR WHAN: Yes. Well, it has become a bit of a one-line statement about the Plan. Essentially that the people make to say, "Well, yes, I am part of the process."

THE COMMISSIONER: Well, look, it's a slogan and I'm trying to find out whether it has any content. And so one way to do that is to ask what you think its content is. "On time" apparently means 2024.

MR WHAN: Yes.

10 THE COMMISSIONER: Thank you. What does "in full" mean.

MR WHAN: It means that we go through the whole process of determining 3,200 gigalitres.

15 THE COMMISSIONER: Why do you say 3,200?

MR WHAN: It's actually now probably 30, with the northern Basin, 31.

THE COMMISSIONER: Well, you can think aloud if you like, but I mean it's - - -

MR WHAN: Yes. But - - -

20

45

THE COMMISSIONER: I think the beginning of the answer means 3,200 - - -

25 MR WHAN: 3,200 - - -

THE COMMISSIONER: --- is no longer a figure that has any meaning, isn't it?

MR WHAN: I don't – "in full" means as the Plan has set out and that means you start with - - -

THE COMMISSIONER: It doesn't mean 3,200, does it?

MR WHAN: You start with 2,750, you have 450 on top of that. You go through the processes in the Plan which enabled a reduction, from a review in the northern Basin. The down water - - -

THE COMMISSIONER: I thought you said 605 is essential.

40 MR WHAN: 605 is essential.

THE COMMISSIONER: Thank you. So that means it's never going to be 3,200.

MR WHAN: Equivalent.

THE COMMISSIONER: What do you mean equivalent?

MR WHAN: Well, the meaning that's in the plan.

MR BEASLEY: Environmental equivalency.

5 THE COMMISSIONER: That is the SDL adjustment for equivalent environmental outcomes means that pre-adjustment, 3,200, can be a lesser figure for the same environmental outcomes. That's what you mean?

MR WHAN: Correct, yes.

10

25

THE COMMISSIONER: Doesn't that mean in order to implement the Basin Plan in full and on time, that by 2024 we will know – the Authority will be able to be satisfied as to whether there has been the equivalent environmental outcomes?

15 MR WHAN: Yes.

THE COMMISSIONER: How?

MR WHAN: That's what they suggest and that's what the legislation the Plan suggests.

THE COMMISSIONER: Well, I wonder about that. I just want to ask you this, then: are you aware of anything, ever, published by the Authority to the effect that by sometime early in 2024, so as to permit reconciliation by June 2024, the supply measures grounding the 605 adjustment will have been put into effect, carried into operation, so as to know whether they have achieved the equivalent environmental outcomes?

- MR WHAN: I am only aware of what I have been told by the by the MDBA over recent weeks about the process they are putting in place to engage and report back as the process goes through. Which, as I understand it, will include regular reporting back on how they think the estimate is going and how they think that the measures are going in relation to their models.
- 35 THE COMMISSIONER: Who is it at the MDBA to whom you spoke to that effect?

MR WHAN: Well, I have been at – my – the MDBA has actually run a stakeholder meeting which I actually was not at, but my office was at, which reported in those terms. Phillip Glide, obviously, ran it but had a number of staff there as well.

40

THE COMMISSIONER: Anything else?

MR WHAN: I haven't got specific names.

45 THE COMMISSIONER: You have in mind the stakeholder meeting.

MR WHAN: Yes.

THE COMMISSIONER: Was there any other occasion apart from the stakeholder meeting to which you – to which you are referring when you talked about - - -

MR WHAN: I've had, obviously, discussions with – with MDBA staff about the process in the course of my job and I have also listened to them when they've appeared before Senate estimates and so on.

THE COMMISSIONER: So Senate estimates, stakeholder meeting – roughly when was the stakeholder meeting?

10

MR WHAN: A few – several weeks ago. I can get you a date but it was a few weeks ago. .

THE COMMISSIONER: If you wouldn't mind, that will be very useful, thank you.

15 And - - -

MR BEASLEY: I mean, that – sorry, to be completely fair, the Basin Authority has put out a publication called "Sustainable Diversion Limit Adjustment Mechanism Draft Determination" in October last year.

20

THE COMMISSIONER: Yes.

MR BEASLEY: Which is RCE 5, which - - -

25 THE COMMISSIONER: Yes, I had that in mind, because - - -

MR BEASLEY: --- while it doesn't reveal how you get to 605, expresses confidence.

- THE COMMISSIONER: Yes. No, I had that this mind when I asked the question, I don't regard that as providing any information as to how you would, by 2024, know that.
- MR WHAN: Sure. And since then and I'm not I'm not I don't know the mechanics of the model either; it's not something which I have expertise in. So but I am aware that they have circulated recently some outcomes from that stakeholder meeting, which I've seen.

THE COMMISSIONER: Have you got them, have you?

40

MR WHAN: Yes, I've got an email.

THE COMMISSIONER: Thank you.

45 MR BEASLEY: Are you – there was some workshops on 28 June this year - - -

MR WHAN: Yes. Yes. Stakeholder – yes.

MR BEASLEY: --- in Canberra. That's what you are talking about, is it?

MR WHAN: Yes. Yes.

5 MR BEASLEY: The "Sustainable Diversion Limit Adjustment Mechanism Technical Workshop Outcomes".

MR WHAN: Yes. That's it. Yes.

10 THE COMMISSIONER: Thank you.

MR BEASLEY: Thanks. Can I just ask a question about – am I interrupting?

THE COMMISSIONER: Yes, but that's fine.

15

MR BEASLEY: Permission granted.

THE COMMISSIONER: I will re-interrupt when I feel the need.

- MR BEASLEY: Yes. Because we have discussed the policy issue of adjust now or adjust later if expressed. The obvious clear preference that we leave the 605 gigs in and work out whether the policy measures you raised issues paper, one of the Commissioner's issues paper issues paper 2 where some provisional views were expressed not final views, as I said before but views of concern the
- 25 Commissioner has about legality.

If you don't feel comfortable in answering this question because it's outside of your domain, I'm perfectly happy for you to say so – but moving away from policy and going to lawfulness, the sections in the Water Act that provide the authority – the power to propose an adjustment and the power to the Minister to make the adjustment to the plan, an SDL adjustment, sections 23A and 23B, also provide that the long-term average sustainable diversion limit that's produced after an adjustment must reflect an environmentally sustainable level of take.

- 35 So the concern the Commissioner has is if 2,750 for the environment even assuming that does result in an SDL that reflects an environmentally sustainable level of take, if that figure drops by 605 gigalitres or 543 gigalitres if you apply the five per cent rule immediately, as at 30 June or 1 July 2019 to create what I will just call a roughly 2,100 gigalitre plan in relation to that is absolutely clear scientific evidence that can't possibly result in an environmentally sustainable level of take.
- These supply measures are not up and running by 1 July 2019, you are clearly left with, if you adjust immediately, a sustainable diversion limit that doesn't reflect an environmentally sustainable level of take and that's the concern about lawfulness in relation to what has happened with the supply measure adjustment with the SDL adjustment. Is that a topic that you're comfortable with in terms of making your

submission for the people you represent or would you rather leave that to lawyers to debate?

- MR WHAN: The legal aspect of it I would certainly leave to lawyers. Other than to say that the process which is being undertaken at the moment is the process that communities and our members were led were given the expectation as to how it would progress. We can only rely on the government's own legal advice and assume that they have got it right.
- 10 MR BEASLEY: Just on that, the legal advice we are talking about - -
 - MR WHAN: And by the way, I have not, myself I have sought no independent view on whether that on that legal advice.
- MR BEASLEY: No. That's fine, but in terms of the government's legal advice have you seen that?
 - MR WHAN: I have I have only seen the statements from the Minister at the time and the current Minister about the legal basis for the Plan.
 - MR BEASLEY: Right. Just on that, slightly straying, one of the things this Commission has sought from the Basin Authority and the government is the legal advices around proper construction of the Water Act and this SDL adjustment as to whether it's lawful. Leaving aside the High Court proceedings, we were told that privilege would be claimed in any event.
 - Using your experience and time as a Parliamentarian, given that these advices are sought on the construction of how we manage scarce and vital water resources, and we're not prepared for the purposes of contested litigation, nor do they involve issues like where potential terrorists in Australia they're not state-level secret type things is there would there be any reason you would be able to provide as to why all these advices are not made available to the public to examine?
 - MR WHAN: No, I don't think I can add to that.

20

25

30

45

- MR BEASLEY: Thank you. All right. I interrupted you, Commissioner. Did you want to keep pursuing - -
- THE COMMISSIONER: Yes. Does it ring a bell with you that, in relation to the 28 June 2018 occasion, the message was given, among other things, that the 2024 reconciliation was an option provided to the Authority by the Basin Plan if the Authority considered it necessary?
 - MR WHAN: As I said, I actually wasn't personally at the meeting. My - -
 - THE COMMISSIONER: I take it you've had a record from your staff.

MR WHAN: I have. And I actually heard that from somebody else, that that was their recollection of what happened – said at the meeting. It was my understanding, I guess – expectation that the – the 2024 reconciliation, should it fall short, would involve recovery of water.

5

THE COMMISSIONER: I'm asking in particular because I referred earlier to an interpretation question which I'm not going to - - -

MR WHAN: However, can I say, we would probably – we would probably try and object to that course. It's a - - -

THE COMMISSIONER: Yes. You see, 7.11 says:

- If it appears to the Authority that a new determination, as at 30 June 2024, of the appropriate adjustment amounts resulting from the notified measures in any additional efficiency measures would produce a result different from the determination made under 7.10, which is the original one, the Authority must by that date determine the new amounts –
- etcetera. And it has occurred to me that that somebody might think that the reconciliation doesn't happen if the Authority doesn't think about it. Now, I'm probably going to report that that's not the proper way to read the Basin Plan that they have to think about it and having thought about it they then decide whether or not an adjustment a further adjustment, so-called reconciliation is necessary. Is that how you understand it?

MR WHAN: I don't dispute your interpretation of it. From the discussions had with the political – with the people involved at a political level, I suspect that their expectation is there would be an adjustment.

30

THE COMMISSIONER: If necessary.

MR WHAN: If necessary.

35 THE COMMISSIONER: There has to – you have to look at it - - -

MR WHAN: Yes. Yes.

THE COMMISSIONER: --- and you've made no bones about the fact you hope there won't be an adjustment ---

MR WHAN: Absolutely. I - - -

THE COMMISSIONER: - - - at least so as to increase water for the environment.

45

MR WHAN: I am certainly – yes. As I said, we are certainly hoping that their estimates prove to be correct.

THE COMMISSIONER: Yes. Well, now - - -

MR WHAN: They being the MDBA of course.

5 THE COMMISSIONER: Yes. According to the MDBA on the 28 June occasion, what's in hand at the moment is to use their expression, "Just the start of the process". The Basin State Governments have until 2024 to complete the projects.

MR WHAN: Yes.

10

THE COMMISSIONER: A project that has only just started by the beginning of 2024 is one which it would be very unfair to judge as to its achievement, wouldn't it?

MR WHAN: Long term, I suspect yes. I think there will have to be, in the modelling, some estimates made but I don't have the expertise to know how that will go. I think the MDBA perhaps, and, reading between the lines, may have been slightly frustrated by the information they have got from State Governments on some of these previously as well. But we do know there's a number of the projects which are underway. Inevitably there will be some which need to change.

20

40

45

THE COMMISSIONER: It's just that, as you say, on the 28 June occasion, in one of these diagrams that people like to put on slides, 2024 is the end of what's called the "implementation phase". You understand that to be the case.

25 MR WHAN: Mmm.

THE COMMISSIONER: That, I must say, that leaves me with the concern that there will still be undesirable uncertainty in 2024.

30 MR WHAN: Potentially.

THE COMMISSIONER: And I find very attractive your arguments, submissions – that the Act and Plan ought to actively engage with the uncertainty, try not to create more than there is inherently and try to assist irrigators and others to the extent they

35 can, in relation to uncertainty.

MR WHAN: Certainly – certainly. I think minimising the level of uncertainty is – would be desirable. It's – how you achieve that is quite difficult given that the Plan does set some pretty strong – pretty strong time frames. I do think that there is elements of a Plan where we need to keep a very close eye on whether the dates are realistic.

THE COMMISSIONER: So you can see why I'm, perhaps, now a little impatient with the slogan in "full and on time" because I am very doubtful as to whether people, including, with respect, yourself, really have a date in mind when you say "on time".

MR WHAN: When we talk "in full and on time", it's certainly in the limitations of the legislation as we have been given at the moment. But, no, certainly, as I said yesterday, with recognition that some things like the water resources planning is going to be difficult to achieve by that time and by the 2019 date and we – I have certainly expressed the view and irrigators – New South Wales irrigators and others have expressed the view that these things need to be done properly, not necessarily squeezed into timeframes. So - - -

THE COMMISSIONER: Yes. So "on time" – I'm sorry if this sounds sarcastic, but I can't help that. So "on time" means on time or such further time as proper implementation requires?

MR WHAN: You may interpret it like that.

15 THE COMMISSIONER: That's unkind, but it's fair, isn't it?

MR WHAN: Look, I – when we – I think when a – in a slogan sense, as you've said, "in full and on time" reflects the fact what we have tried to do as the National Irrigators' Council in this is given an indication, rather than being, as we were portrayed, certainly in this state at times, as people who were trying to oppose the Plan, we were actually willing to implement the process, getting it implemented in full – "in full and on time" became, as you say, a slogan to an extent.

But if there was a consensus which said that to do the job properly, for instance, on Water Resources Plan there needs to be some flexibility in that date, albeit with set – you know, making sure that these things don't just slide out, then I don't think we would object to that. We would probably be supportive of that. The slogan in itself is – as you've characterised it, properly and correctly, is essentially about us indicating that we are not trying to be people who bring the plan down and stop it from being implemented. We want to it be a part of the process and working with governments.

THE COMMISSIONER: Yes.

35 MR BEASLEY: Can I just draw something to your attention Commissioner?

THE COMMISSIONER: Yes.

MR BEASLEY: It's not a question for the witness but I don't want to forget to say it during the course of the hearing that some of these materials have just been added to an SDL adjustments folder – the 28 June stuff. Behind tab 11, it looks like a PowerPoint by the MDBA.

THE COMMISSIONER: Yes.

45

5

20

MR BEASLEY: I'm not sure it is paginated but there is a – it might be an overhead slide because it's in print you could read from about 15 metres but it's got a heading 'Reconciliation'. Towards the back.

5 THE COMMISSIONER: Yes, I have it.

MR BEASLEY: Third bullet point:

MDBA acknowledges that some projects may not deliver the full environmental benefits expected.

I just – drawing that to your attention as to how that stacks up with 7.17 of the Plan which requires a satisfaction of environmental equivalency.

15 THE COMMISSIONER: No, thank you. The rest of that sentence, Mr Whan, reads:

And other projects may improve and deliver greater environmental benefits as refinements are made through learning and adaptation.

20

MR BEASLEY: Yes.

THE COMMISSIONER: And I hope I've gathered correctly from your submission to me and to others that you – that the – your organisation strongly supports the steps being taken to permit that adaptive management of these measures.

MR WHAN: Yes, maximum flexibility we would advocate to achieve the environmental outcomes.

30

THE COMMISSIONER: Yes. Do I gather that – I'm sorry if this is repetitious – that's one of the reasons why you urge appropriate sharing of information with the communities?

35 MR WHAN: Yes...

THE COMMISSIONER: Thank you. Now, the acknowledgment that Mr Beasley read out by the Authority that some projects may not deliver the full environmental benefits expected comes as no surprise to you. You were aware of that, aren't you?

40

MR WHAN: Yes.

THE COMMISSIONER: Now, doesn't that mean that – the way the Plan is presently structured with its timelines and the way the Authority has announced its understanding of the matter – means, I'm afraid, that it is uncertain whether, in 2024, the 605 may have to be partly reversed.

MR WHAN: That would be correct. It is – it is a very challenging timeframe and it is uncertain.

THE COMMISSIONER: Now, I would understand if you don't want to give a categorical answer to my next question, but it's really a matter of policy. If – so it's a hypothetical – if what the MDBA acknowledges might happen does happen, so that a reconciliation would require the Authority to make a different adjustment figure, perhaps less than 605, would your organisation seek to alter the Act or the Plan so as to prevent that from happening?

10

5

MR WHAN: No. We would certainly put in submissions which pointed to the damage that removal of productive water takeout – sorry, when I say "no", from the point of view of me sitting in the CEO's chair I don't know that - - -

15 THE COMMISSIONER: I don't want to embarrass you or your successor, no.

MR WHAN: I don't know – I don't – yes, I don't know that I will still be the CEO at that time. But, in fact, I'm fairly sure I probably might be travelling or something like that but we will see. But the – in terms of amending the Plan, I wouldn't see us running a campaign to change the Plan. If there was – you know, sound consideration to the various timelines in the Plan which suggested there needed to be another couple of years for some aspects of it and that was something which was, you know, fairly unanimously agreed, I think that's something we would certainly consider.

25

20

THE COMMISSIONER: That's why I made my sarcastic comment about the slogan "on time".

MR WHAN: Yes. And - - -

30

THE COMMISSIONER: So let's concentrate on "in full". I take it then, so far as you're concerned today, implementing in full certainly involves accepting that the reconciliation process might involve an adjustment so as to reduce from the 605.

35 MR WHAN: Yes.

THE COMMISSIONER: Thank you. Now, by the way, we've – both of us, and understandably, used the word – used the number 605, but because of the five per cent ceiling it is actually something less.

40

MR WHAN: Yes.

THE COMMISSIONER: So all your references to 605, as mine, ought to be understood as adjusted by reference to the ceiling.

45

MR WHAN: Yes.

THE COMMISSIONER: Thank you. Thank you, Mr Beasley.

MR BEASLEY: I just want to give you the opportunity to expand on, if you want to, part of your submission at page – I'm directing you to page 7 of your submission, second paragraph, which is key concern – sorry, I will just let you get there. Page 7, second paragraph. We are talking about Water Resource Plans:

A key concern for our members is that WRPs do not end up being a one-size-fits-all policy.

10

5

Do you want to expand on the concern there, that - - -

MR WHAN: Our concern certainly is that in New South Wales in particular, with a fairly large turnover of staff in the areas which have been dealing with this, that – and the very tight timeframe – that a model might be rolled out which doesn't bring in enough local input from the catchments. We have a very strong philosophy that we would like to see locals involved in the management of their rivers and in these processes. Now, New South Wales - - -

MR BEASLEY: So large turnover of staff in the department charged with doing this?

MR WHAN: Yes. And to – and I think – I don't think I'm making an unfair criticism to say that that has certainly made – set the process back.

25

35

MR BEASLEY: Because of a loss of knowledge?

MR WHAN: Because of a loss of knowledge is my interpretation of it.

30 MR BEASLEY: And technical expertise, I – yes, go on.

MR WHAN: And I'm certainly not criticising the current Minister in that. I think, despite the fact that he and I used to sit opposite each other in the Parliament, I think he's a very good Minister. But – and this is actually something that's been going on now for a decade in that department. So I – there is a concern that the timeframe might see – – –

MR BEASLEY: Yes. I was going to come to that.

40 MR WHAN: The timeframe might see those essentially becoming a bit of a cookie cutter approach, but there is quite a lot of consultation going on which I'm not directly involved with, with catchments at the moment, and with the state-wide representatives of the catchments. So that's promising. It remains to be seen whether they are able to achieve progress on all those plans and in the deadlines.

45

MR BEASLEY: I may have dreamed this, and I'm quite often having situations where I'm not sure if I have dreamt something or it has actually happened in relation

to the Water Act and the Basin Plan, but did I read somewhere – and perhaps you can tell us, are New South Wales contemplating seeking an extension of time to lodge their Water Resource Plans?

5 MR WHAN: I - I'm not sure that you - I haven't heard it put in those terms.

MR BEASLEY: Right.

- MR WHAN: But what I have heard from the MDBA is that they are aware of the timeframes. In one of the peak group meetings that we had there was some discussion about whether or not there was mechanisms that might allow more time, as long as progress was being made. And I don't know legally what those mechanisms are; I just heard that comment.
- MR BEASLEY: Right. In your submission you also address issues of compliance and the illegal take of water and express a view of that, but you seek to have it put in perspective. Does have you and, please, if it's not something you for your members have given detailed consideration to, but there has recently been some amendments to the Water Management Act in New South Wales in relation to issues
 of compliance and also in relation to setting some requirements, I think, in terms of individual daily extraction limits. And I think it has been put off dealing with total daily extraction limits to another date to see how things go. Does the Irrigators' Council have any view about the appropriateness or otherwise of the recent legislative amendments to the Water Management Act?

MR WHAN: The New South Wales Irrigators Council has been dealing in detail with that. In general – we have been in general quite supportive of the recommendations that came out of various inquiries in New South Wales.

30 MR BEASLEY: So that's – you are talking about the Matthews inquiry, the Ombudsman.

MR WHAN: Matthews inquiry. Yes, the Matthews one in particular.

35 MR BEASLEY: Yes. All right.

25

MR WHAN: The implementation is complex in some areas, so there are a few things which cause us some concern. In particular, we don't – we certainly agree with the – with the aims that are there in the Matthews report, and also the report that the MDBA did on the targets for compliance, so for instance 95 per cent of take being measured in the northern Basin, those sort of things. There is a few issues there with the – which need to be resolved with the regulation over the powers of the Minister on – and our position there would be that we would like to see a very high level of transparency around why, under what circumstances, those powers can be used. Because obviously - - -

MR BEASLEY: What are these powers like? To go into properties, or - - -

MR WHAN: Embargo power.

MR BEASLEY: Embargo power. Right. Okay.

5 MR WHAN: So we - - -

MR BEASLEY: This is – this is – we are now moving to protection of environmental flow.

10 MR WHAN: Yes, that's right. Compliance-wise - - -

THE COMMISSIONER: This is the shepherding motion.

- MR WHAN: Yes, yes. Which, just as a broad principle, we are supportive of the capacity to protect environmental flows as long as they can be clearly identified that that's not coming out of a flow which otherwise legally would have been able to be extracted by an irrigator. That's where you need the transparency under the circumstances when it would be used and transparency on when it is used.
- 20 MR BEASLEY: The mechanisms that have been suggested are they are to have tradable individual daily extraction limits and, if they are implemented, to have particular zones in the relationship, total daily extraction limits, so that somehow things could be manipulated to in some way to protect environmental flow.
- 25 MR WHAN: Yes. That level the level of detail how that works is really the New South Wales Irrigators Council.

MR BEASLEY: Yes.

30 MR WHAN: I don't have that knowledge.

MR BEASLEY: Right. Okay.

MR WHAN: The other broad issue out of the compliance there is about the national

- the Australian standard for meters, which at the moment is manufacturers aren't
generally able to comply with. There needs to be some – some review of that
standards to actually involve that industry. So that it is one which they can provide
meters on at the moment. Most meters would not comply with it – in fact all, I think
in most states – over a certain capacity. And, for instance, for that standard to be
revised so that it can also take into account overseas – reliable overseas standards.
US, EU, that sort of thing, which would be logical.

MR BEASLEY: Commissioner, I don't have any further questions for Mr Whan. If you don't, I would still like to extend an invitation to him to - - -

THE COMMISSIONER: I have a couple.

45

MR BEASLEY: Go ahead.

THE COMMISSIONER: Page 9 of your submission. At the foot of that page – this is not the only place you have said it – you refer to the notion of 100 per cent of the risk of the supply measure projects being borne by irrigators and irrigation communities, because in 2024 there's a reconciliation. If the equivalent savings aren't delivered, the water has to be recovered. You and I have talked about this already. I, with respect, accept that the brunt of the adverse impact of the recovery of water as you put it there, is on the irrigators and their communities.

10

5

MR WHAN: Mmm.

THE COMMISSIONER: Did – do you also accept that it follows from the hypothetical that you refer to there, that the "savings are not delivered", shows that in the meantime before 2024 the environment would have borne the risk, by definition, because if the equivalent outcomes have not been delivered so as to justify the adjustment it is because the environment has either gone backwards or not been improved.

MR WHAN: Look, I think that goes back to the question that we had before about which of those two policy options you take.

THE COMMISSIONER: I think it does, yes.

MR WHAN: And the answer that I gave then, I think, stands in this case as well. The water has not yet been recovered. We are in a process of implementing a Plan, it's a progressive process. The environment in 2012, it wasn't an instant benefit for the environment, it is a process of implementing over time and this is still part of that process.

30

THE COMMISSIONER: Well, you can't have it both ways, can you? It is not instant, but you say there are some early good signs.

MR WHAN: Yes. And that's shown in the MDBA reports and other scientific reports. So yes, there are really good signs, but we are halfway through now and we are seeing some of those signs in different – halfway through implementation of the plan. Yes, to an extent, if you were to say, well there will be an – there will be an immediate benefit if you put 605 gigalitres back into the environment in – as of when the Water Resources Plan is put in place middle of next year. That you would then get a benefit, but what you would also do is cause significant disruption and uncertainty for industry and negative economic impacts which may or may not then see water returned later on, which I think is an uncertainty which is far greater.

THE COMMISSIONER: Thank you.

45

MR BEASLEY: Is there – can I just give you an opportunity to – you can either expand on anything you've raised in your submission or is there anything you feel

we haven't covered during the course of your evidence or something new you wish to have the Commissioner consider please feel free to do so now.

THE COMMISSIONER: I should you can assume, because it is true, that I have read all your submissions.

MR WHAN: I will – I will – I can see that you have. So I don't have anything particularly to add. We are obviously pleased to have the opportunity to engage with the Commission in the process. We do believe that the Basin Plan needs to be measured in the long term on outcomes and that will take substantially longer than the 2024. We believe that it's vital that in considering your terms of reference, which are very environmentally focused that you also consider the economic and social impacts and the importance of the irrigation sector, the Australian economy and that's – you know, something which 15, \$15.5 billion industry for Australia, which the Murray-Darling Basin is a very significant portion.

And without – I think it's very important for the Commission to understand that if water – it's not – no one is saying that changes to the Plan would shut down irrigation altogether, but what it would do is change the affordability of water and where it's used and the sort of products that are being produced in the Basin and we are seeing to an extent some of that happening, with natural shifts because of the water market, but that would be exacerbated to the detriment of particular industries in the future if there was substantive changes to the recovery targets out of the Basin Plan.

25

10

15

20

THE COMMISSIONER: Now, I don't want to oversimplify things but should I gather that last explanation you've given, in particular, points to the usual effect of what happens when an input is reduced in its supply and the demand continues - - -

30 MR WHAN: Yes.

THE COMMISSIONER: --- so as to increase price.

MR WHAN: And cost goes up.

35

THE COMMISSIONER: I'm not suggesting it's quite so simple as that but that's the general idea.

MR WHAN: I think you have probably had some evidence about the way the production is shifting. That's the natural impact of the water market, but we need to recognise it all changes to availability of water. The other issue, which I know you deal briefly in the Plan, which I just wanted to briefly mention is climate variability.

THE COMMISSIONER: Yes.

45

MR WHAN: People say that the Plan is not – it doesn't take into account climate change. I just wanted to point out that in a sense irrigation allocations do adjust to

climate variability. So in a dry year, general security of water, is not there. And, for instance in the 2016/17 year the total extraction out of the Murray-Darling was somewhere under 60 per cent of what would be the SDL. So - - -

5 MR BEASLEY: So entitlement is different to allocation. I think that's the policy reason the MDBA has given for not including climate change projections.

MR WHAN: Yes. So to an extent the irrigation entitlement changes with climate and with availability of water as does the environmental water holders entitlement.

THE COMMISSIONER: It changes with weather.

MR WHAN: Weather, yes.

10

- THE COMMISSIONER: And for the time scale in question, the difference between weather and climate is one that the Authority thinks doesn't require any different approach from the usual adjustment of allocations according to the weather.
- MR WHAN: The I'm just looking at it from an irrigator point of view and saying yes, in climate our climate, current climate variability. Our policy position that we put forward, and which I just wanted to highlight on climate change, is that in the longer term as adjustments are made, the burden or risk needs to be shared. It can't just be put on to productive users.
- 25 THE COMMISSIONER: I see.

MR BEASLEY: Sorry, just to – so you can take comfort in this, when the Commissioner is – and this is picking up your comment that the terms of reference are environmentally focused, please be assured that when the Commissioner is being asked to consider whether the Basin Plan in its current form or any amended form is likely to achieve its objects, that's – we are not excluding - - -

MR WHAN: All objects of – okay. Thank you.

35 MR BEASLEY: Any particular object.

THE COMMISSIONER: That's a – that's very important. I do understand the tenure of your comment. I am not responsible for my terms of reference.

40 MR WHAN: I know that.

THE COMMISSIONER: But the statute, as Mr Beasley has pointed out, has much more than the environment driving the purpose of the provisions.

45 MR WHAN: Okay.

MR BEASLEY: Thank you for your detailed submission. And thank you for your attendance.

THE COMMISSIONER: I'm much obliged for your attendance and for your manner of giving evidence. Thank you.

MR WHAN: Pleasure, thanks.

10 <THE WITNESS WITHDREW

[10.32 am]

THE COMMISSIONER: Now, is that a - - -

MR BEASLEY: Can I suggest we have been going to about a time that would normally be the tea break, that we do that now.

THE COMMISSIONER: Yes.

20 MR BEASLEY: A coffee break I should say.

THE COMMISSIONER: Tea break. So if we say quarter to 11, is that all right?

MR BEASLEY: Yes, sure.

25

THE COMMISSIONER: We will adjourn until quarter to 11, please.

ADJOURNED [10.32 am]

30

RESUMED [10.46 am]

35 MR BEASLEY: Whenever you are ready, Commissioner.

THE COMMISSIONER: Good.

- MR BEASLEY: Just before Mr Harriss is called, I'm told that it would make life easier for the staff if I put on record documents I referred to yesterday that I didn't say I was tendering, but I wish to. So in order in Mr Hooper's bundle for his evidence, tab 2, was the NBAN's submission to the Basin Authority on the Northern Basin Review. I tender that. Tab 3 was the NBAN submission to the Water Reform Division, Department of Environment, Review of the Water Act 2007.
- It's a submission dated 30 July 2014 signed by Cheryl Buchanan, B-u-c-h-a-n-a-n, who was at the time the Chair of NBAN. I tender that.

Tab 4, NBAN's submission to the New South Wales Natural Resources Commission and Office of Water on the "NRC water sharing plan review", 4 February 2013. I tender that. Tab 5 was NBAN's suggestions for legislative amendment to the Water Act provided to Mr Burke when he was the Federal Minister for Water. I tender that. In relation to Ms Morgan's evidence, there was a reference to an email from Will Mooney of MLDRIN to Monica Morgan, 24 October 2017. I tender that email. There was also a reference to an email from Maxine Kerr, the Stakeholder Engagement Officer from the MDBA to Ms Monica Morgan, dated 12 September 2017. I tender that.

10

15

5

I referred to a map for the traditional lands of the Yorta Yorta Nation, behind tab 8 of Ms Morgan's folder. I tender that. And there was a reference to a memorandum of understanding between MLDRIN and the Murray-Darling Basin Commission 26 March 2006 behind tab 10 of Ms Morgan's folder. I tender that. Did I say tab 10? I meant to say tab 9. Okay. In what has been described as the Aboriginal core folder there was a reference to a document behind tab 14. Natural Cultural Flows Research Project "Dhungala, D-h-u-n-g-a-l-a, Baaka, B-a-a-k-a: Rethinking the Future of Water Management in Australia". A report dated 2018. If I didn't say it, that was behind tab 14. Behind tab – I tender that.

20

25

30

Behind tab 15, I tender a document, national cultural flows research project, "Cultural Flows: A Guide for First Nations", published 29 June 2018. Behind tab 16, I tender National Cultural Flows Research Project, "A Pathway to Cultural Flows in Australia". A report also published in June 2018. Behind tab 17, there was an Australian Government offer, 7 May 2018 – sorry, announced on 7 May 2018 as part of the package announced before the vote on the sustainable diversion limit adjustment disallowance motion. I tender that. And I also – I think with both witnesses, but certainly with Mr Hooper, referred to a document that isn't in any folder. It's a Murray Lower Darling Rivers Indigenous Nation MLDRIN document, entitled – although NBAN is said to have had a role in its preparation, "Ensuring Equity in the Development and Assessment of Water Resource Plans". MLDRIN, M-L-D-R-I-N, discussion paper, April 2016. I tender that.

THE COMMISSIONER: Thank you.

35

MR O'FLAHERTY: Commissioner, the next witness will be Mr David Harriss.

THE COMMISSIONER: Thank you.

40

<DAVID ANDREW HARRISS, SWORN</p>

[10.51 am]

<EXAMINATION-IN-CHIEF BY MR O'FLAHERTY</p>

45

ASSOCIATE: Please state your full name.

MR HARRISS: David Andrew Harriss.

THE COMMISSIONER: Please sit down, Mr Harriss.

5 MR O'FLAHERTY: Mr Harriss, you have provided a statement to this Commission, have you not?

MR HARRISS: Yes.

10 MR O'FLAHERTY: Do you have a copy of that statement in front of you, or can we – I think that's the Basin Plan. Just one moment. We will just get a copy of that in front of you.

MR HARRISS: Thank you.

15

MR O'FLAHERTY: That's a statement dated 18 July 2018?

MR HARRISS: Yes.

MR O'FLAHERTY: I will just take you to paragraph 18. And there's reference to the forming of the Murray and Lower Darling indigenous nations in about 2008. Should that be 1998?

MR HARRISS: Yes, that should be 1998.

25

MR O'FLAHERTY: So, apart from that correction, is this statement true and correct to your best of your knowledge?

MR HARRISS: To the best of my knowledge, yes.

30

MR O'FLAHERTY: I tender the statement of David Harriss dated 18 July 2018.

THE COMMISSIONER: Thank you. I have – I have read that and I'm very grateful for your assistance, and Counsel Assisting and I will probably have some elaborating questions.

MR HARRISS: I look forward to them.

THE COMMISSIONER: Thank you.

40

MR O'FLAHERTY: Thank you, Commissioner. Just as a bit of background to you, Mr Harriss, you describe yourself as a Water Management Consultant and Director of Access Water Management.

45 MR HARRISS: That's correct.

MR O'FLAHERTY: Wonder if you might describe what Access Water Management does.

MR HARRISS: When I left the position of Commissioner for Water in New South Wales, I was requested by a number of people if I would provide assistance to them, so I received financial advice which would be to establish my own company, to which I would operate under. So I did. Called it Access Water Management Proprietary Limited. Subsequently, I have been – whilst being semi-retired, I have provided advice to a number of clients and have been working – provided – working for the Department of Foreign Affairs and Trade in providing advice on water management in India.

MR O'FLAHERTY: So apart from the Department of Foreign Affairs and Trade, who are the nature of your clients? Are they irrigators, are they - - -

MR HARRISS: They're mostly water users, mostly irrigators mostly in the southern Basin, but I'm also a Director of the Murray-Darling Wetlands Working Group, which I had originally established back in the early 90s.

MR O'FLAHERTY: Yes. I was going to ask you about that. So that Murray-Darling Wetlands Working Group, what's the primary function of that?

MR HARRISS: It was established in the 1990s, effectively to implement a lot of rehabilitation works to degraded wetlands. There had been a lot of work done up until that period in identifying the wetlands along the Murray and the Lower Darling, Murray in particular. There had been a lot of work done and reports produced about what should be done for them and this was to establish a group of community and government people incorporated who could apply and bid for funds to actually implement works to rehabilitate those wetlands.

And I chaired it for six years before stepping aside, and the chair was passed over to an irrigator from Dareton who was interested in wetland management and that group, particularly in my absence, was particularly successful in getting up a number of projects, including winning the – I think it was the 2007 Thiess National Rivercare Award for works they had done in rehabilitating wetlands throughout the Murray

MR O'FLAHERTY: When you say "works" is that infrastructure works or - - -

MR HARRISS: Typically infrastructure work, block banks, regulated structures, and diversion of water into those wetlands. Back in – just for reference, back in the early 2000s, we undertook some – the government, in privatising irrigation corporations, invested in channel seepage line to provide water savings and reduce the losses. In Murray irrigation that generated 30 – well, we believe it generated 60,000 megalitres, of which 30,000 was to be returned to the government for environmental purposes in the Murray valley.

15

30

35

valley.

We effectively handed management of that 30,000 megalitres to the Murray-Darling Wetlands Working Group who could temporarily trade that water in dry years and generate some funds so that they could then fund their own continued projects without having to go cap in hand every year to government trying to seek external funds. Subsequently, I think the NSW Government recovered that water and has been now managed by the Department of Environment and Heritage since.

MR O'FLAHERTY: You mentioned that you were the New South Wales Commissioner for Water. Yes, Commissioner in the Office of Water. That was your last government position

MR HARRISS: That's right.

MR O'FLAHERTY: From 2009 to 2014.

MR HARRISS: Yes.

5

10

15

40

45

MR O'FLAHERTY: What was the nature of that role?

MR HARRISS: It was effectively to head water management in – bulk water supply and water management in New South Wales. That was to develop the policy, the planning, the regulatory functions, many of the management functions for water across New South Wales, and to contribute to be a position of working with the Murray Darling Basin Authority and the Commonwealth through the Basin Officials Committee.

MR O'FLAHERTY: Is that a role that includes what one might call river operations, or is it distinct from that?

- 30 MR HARRISS: It it originally included river operations, but with the separator of the regulator from the operator it became the function of what was State Water and subsequently Water New South Wales to effectively manage the assets and deliver the water as was requested for whatever purpose.
- MR O'FLAHERTY: And by river operations, I mean and if you mean something different, please correct me. The physical operation of weirs and locks and reservoirs.

MR HARRISS: Yes.

MR O'FLAHERTY: That's a separate – that was a separate function by – run by a different office from yours?

MR HARRISS: Correct.

MR O'FLAHERTY: Whereas yours was more a regulatory licensing policy?

MR HARRISS: Policy development, correct.

MR O'FLAHERTY: You mentioned in paragraph 5 of your statement you talk about your involvement in first the Murray-Darling Basin Commission and then as part of the Basin Officials commissions – Committee, rather.

MR HARRISS: Yes.

5

35

45

MR O'FLAHERTY: What was the nature of the role in the 11-odd years in the Commission? What was the work – primary work that was done then?

MR HARRISS: Well, pretty similar. It was sharing resources between the jurisdictions under the Murray-Darling Basin Agreement, which was 1988. At that stage I had been – I had worked in the Murray valley since 1989 and was appointed to the position of Regional Director for the Murray Region of the NSW Government – I think it was called the Department of Land and Water Conservation at that stage – in 2006. As part of that it was determined that I should be the New South Wales Deputy Commissioner to the Murray-Darling Basin Commission from that period. Just to put it in perspective, at that stage the – they had a similar ministerial council which was represented by three ministers from each jurisdiction and there was a - - -

MR O'FLAHERTY: That's New South Wales, Victoria and South Australia?

MR HARRISS: Commonwealth and subsequently Queensland and the ACT.

Similarly, there was a Commissioner and Deputy Commissioner from the respective jurisdictions and I think it was agreed eventually that that was very unwieldy, having so many people around a table around any particular time, coupled with all their support staff and so on. So I don't think it was disagreed by anyone to sort of rationalise some of that through the Water Act and reduce the numbers, if nothing else.

MR O'FLAHERTY: And then following the passing – passage of the Water Act, I take it rather than being a Commissioner to the Murray-Darling Basin Commission you were then an official in the Basin Officials Committee.

MR HARRISS: I was the New South Wales representative on the Basin Officials Committee.

MR O'FLAHERTY: You say you were a senior official. Is there a distinction there?

MR HARRISS: No, there was one representative from the respective jurisdictions and that was typically of the most senior official responsible for water management in that jurisdiction, for the policy, the planning and the regulatory aspects.

MR O'FLAHERTY: I just want to ask you some questions about your involvement on that Basin Officials Committee. In paragraph 10 you talk about you make a

reference that the Basin Officials Committee members using your words, "weren't invited to the table" in respect of the Murray-Darling Basin Guide until June 2010.

MR HARRISS: Yes.

5

- MR O'FLAHERTY: And I will come to that. But what was the nature of the what was discussed or what was the nature of the functions between 2008 and June 2010. What if not the Guide, what was it then?
- MR HARRISS: There was a lot there was a lot of discussions about real time management, because we were in the middle of the Millennium Drought and at stages some stages during that we had to suspend the normal sharing arrangements under the Murray-Darling Basin Agreement because they weren't they were so dire they weren't meeting the needs of communities throughout the length of the Murray River. For example, it was brought on effectively saying there is potential for South

MR O'FLAHERTY: Yes.

Australia to run out of water.

- MR HARRISS: And no one from any jurisdiction was going to sit around and watch a town or towns along those rivers run out of water. So we believed that there was time to actually set aside the normal sharing arrangements because - -
- MR O'FLAHERTY: Is this the mainly the sharing arrangements for New South Wales and Victoria from the relevant reservoirs?

MR HARRISS: And to South Australia as well, because under the – those arrangements each state was - - -

30 MR O'FLAHERTY: Had entitlements.

MR HARRISS: --- had entitlements, and so on. So ---

THE COMMISSIONER: Historically, Lake Victoria was an aspect of those arrangements, wasn't it?

MR HARRISS: Yes. The management of all of the storages were part of that. In fact, I think we suspended some of the rules which didn't allow trade of water out of the Lower Darling when it was in New South Wales' control, but at that stage there was no water coming down the Murray so we took an approach, "Well, let's look at this as a basin-wide process." And for some stage we could allow water to be traded where it would have been traded in – within the Lower Darling itself, only, under our water sharing plan at the time, we said we would suspend that and allow that water to be traded into – particularly downstream into South Australia, because there were permanent plantings which were desperate to get water at that stage.

THE COMMISSIONER: It's fair to say, isn't it, that although the Basin – although the Water Act and the Basin Plan are historic achievements, they were preceded by really considerable intergovernmental cooperation of a kind you've just described?

5 MR HARRISS: Absolutely, since 1988, formally the Murray-Darling Basin Commission, even going back to 1902 through the River Murray Commission.

THE COMMISSIONER: Yes.

- 10 MR O'FLAHERTY: You say you weren't invited to the table until June 2010. You would have been, of course, aware that following passage of the Water Act the MDBA, one of its primary functions if not the primary function would be the formation of a Basin Plan.
- 15 MR HARRISS: Yes.

MR O'FLAHERTY: Did you – did you ask to be invited to the table?

- MR HARRISS: I think all the states, or particularly the eastern states, made it very clear that they should have been party to the development of the Basin Plan because they came with considerable expertise, particularly in the operations and delivery of water.
- MR O'FLAHERTY: You make that point I think later on in that paragraph, where sorry, in paragraph 11 where you wanted to be part of the development because you the states were the operators. Did the Authority give a reason why you weren't part of that process?
- MR HARRISS: No, I just think it was they were given the responsibility for developing the plan - -

MR O'FLAHERTY: Right.

MR HARRISS: --- as part of the Commonwealth department, the new, then,
Murray Darling Basin Authority and they took it as their responsibility to do so ---

MR O'FLAHERTY: And when you were invited to the table, was that in a form of a draft Guide?

40 MR HARRISS: We had – we had the Guide prior to that, from memory, so we were looking at - - -

MR O'FLAHERTY: Right.

45 MR HARRISS: --- we were discussing issues about how to recover the water and all the things, quite frankly, I think we're still talking about.

MR O'FLAHERTY: Yes. And so when – so you were given – the Basin Officials Committee were given copies of the Guide or a draft version of it.

MR HARRISS: From memory we were provided a lot of that stuff, yes.

5

MR O'FLAHERTY: And that's when you are talking about in paragraph 12 – you're looking at SDL approximately 4,000 – sorry, a reduction in the SDL of 4,000.

MR HARRISS: At that stage, I think, the Guide to the Plan had come out. It had recommended about 4,000 gigalitres being the amount of reduction in - - -

THE COMMISSIONER: It's not a reduction of SDL at that point; it's a reduction in the take so as to produce an SDL.

- MR HARRISS: That's right. And a reduction in the take by about 4,000 gigalitres. And that came on the top of we had been working for years to recover water for the Living Murray. And, in fact, it even went back as as the Commissioner here has mentioned, we have been working on these things for quite some time.
- In the New South Wales and its development of Water Sharing Plans for the main regulated rivers, within the Murray-Darling Basin develop Water Sharing Plans in 2004 that effectively recovered 205 gigalitres for the environment. That wasn't part of the further gigalitres to be recover for the Basin Plan and, you know, that was one of the things that New South Wales said, "Well, we believed that we had shown a bit of initiative". The other states said, "Well, you had the capacity to show initiative because you haven't done anything so far."

THE COMMISSIONER: Were those attempts to recover from the position of over allocation? Were they, as it were, credited to you in reaching the baseline amount for the Basin Plan?

MR HARRISS: Apparently so - - -

THE COMMISSIONER: Yes.

35

30

MR HARRISS: Apparently it – the work we had done previously leading up to 2007 was, supposedly, all considered in establishing the baseline from which you needed to recover further water.

40 THE COMMISSIONER: Thanks.

MR O'FLAHERTY: And that's including the 500 gigalitres you refer to as part of the Living Murray.

45 MR HARRISS: Yes. Yes.

THE COMMISSIONER: Now, why was it 500? It's a suspiciously round figure. None the worse for that, no doubt, why 500?

MR HARRISS: It was effectively just a target. When the policy was agreed, "What kind of volumes do we want to start to recover for the Living Murray, as a first step?"

THE COMMISSIONER: Yes.

10 MR HARRISS: And - - -

THE COMMISSIONER: So it was in a sense and, again, I'm not – this is not a criticism, far from it. In the sense it was experimental, along the lines of, "See how we go, first of all, recovering 500" and then "Does it make the kind of difference that we might want to see?"

MR HARRISS: That's right. But, at the same time, it was also about a figure that we believe we could largely recover through water savings projects. So the enter into the market to recover actual entitlement under Living Murray was preferably the second order issue. Primarily, we were going to recover that water for – through infrastructure and water savings works. Similarly in the recovery of the water for the Snowy River – was the same thing.

THE COMMISSIONER: Yes. Thanks.

25

15

20

MR O'FLAHERTY: And the decision you make about the – you would refer to about this 500 gigalitres, is that the one that's sometimes called the Living Murray First Step?

30 MR HARRISS: Yes.

MR O'FLAHERTY: And that would seem to imply that, at the time of the decision being made, there was a recognition that more needed to be done but at least, "At this point, we will recover this amount."

35

MR HARRISS: We would recover in the first instance. We would look at adaptive management and, you know, then work out the appetite to go to the next step.

- MR O'FLAHERTY: In paragraph 22 of your statement you talk about the what I might call the concerns raised by various states about the figures in the guide. And you refer to the 4,000 to 7,000 range. And we have heard a lot of evidence about that range. Do I take it that a lot of the or the concern in that first dot point being far too high, was that a concern that was raised by New South Wales and Victoria?
- 45 MR HARRISS: It was it was raised within the state in the first instance because at that stage - -

MR O'FLAHERTY: In New South Wales?

MR HARRISS: In New South Wales, because, for a number of issues, as that stage from memory there had been no articulation about where that water had was going to come from; which jurisdiction

MR O'FLAHERTY: Yes. Is that the reference in paragraph 26 where you were concerned that that sizeable amount or, at least, the amount that was eventually reached of reduction, or return to in the environment could be taken or could be allocated to New South Wales?

MR HARRISS: Yes, absolutely. Because we believed we were the only state at that stage with – I still think New South Wales is – with the high security and general security tiers of water security and we had much more volume available. And therefore at that stage, too, we had just been going – we were right in the middle of the Millennium Drought and there was very little allocation to general security entitlements. So people were under financial stress and, you know, this would be the logical place for people to recover entitlement from.

MR O'FLAHERTY: And the concern "far too high" – was that a concern from a social and economic perspective?

MR HARRISS: Yes.

5

10

15

35

45

25 MR O'FLAHERTY: The next two dot points, are they a reference to constraints?

MR HARRISS: Very much so. A reference to constraints.

THE COMMISSIONER: Are they a reference to anything other than the Barmah 30 Choke?

MR HARRISS: Yes. It also includes – if the Murrumbidgee River has a constraint down – the water passes through a series of low – what's called a Lowbidgee Wetlands and there is a physical limit about 9,000 megalitres a day before water goes over the bank and passes out over the floodplain.

THE COMMISSIONER: So it's a constraint in the sense that it will frustrate an intention to pass more than a particular volume down the stream - - -

40 MR HARRISS: Yes.

THE COMMISSIONER: --- in the sense that when you reach what I will call the "back limits", water will not only go down the stream but it will also spill over the banks?

MR HARRISS: Yes.

THE COMMISSIONER: It's a constraint on the realisation of something that the natural stream won't permit. In other words, the banks are only so high.

MR HARRISS: Yes.

5

THE COMMISSIONER: And once the water breaks the banks, it has broken the banks.

MR HARRISS: That's right. And that makes it difficult to get a certain volume downstream where that water will pass over the bank.

THE COMMISSIONER: Certainly. But it's just in the nature of a stream, isn't it?

MR HARRISS: Yes. There's a - - -

15

20

THE COMMISSIONER: I'm not sure why the word "constraint" is used.

MR O'FLAHERTY: Is it – perhaps used in this sense that in order for environmental objectives downstream, one must deliver water to that point. The way in which the system is constructed is that we have reserves of water upstream and in between we have a limited, if we were to reduce the river to a pipeline – conceptually – there's a limit to what we can pump down that pipeline.

MR HARRISS: Yes. That's the case. There's a limit to how much water can be delivered within the natural channel downstream – more water can go downstream, it goes overbank but that requires, you know, almost like an exponential increase in water to go - - -

THE COMMISSIONER: Yes.

30

MR O'FLAHERTY: Yes.

THE COMMISSIONER: I do understand that.

35 MR HARRISS: Yes.

THE COMMISSIONER: It's – it does involve, doesn't it, as Mr O'Flaherty has just said, it does involve viewing the river as a conduit?

40 MR HARRISS: Yes.

THE COMMISSIONER: To get from usually a regulated storage down to a place further downstream, as you say, intervening there is what we have all learnt to call a constraint, which is just the river.

45

MR HARRISS: It's just the river and the river channel has often been referred to a pipe, a drain, a channel.

THE COMMISSIONER: Which it isn't, of course.

MR HARRISS: No, it's not. It's a natural asset.

THE COMMISSIONER: I'm just wondering and I don't know that I will spend much attention on this in the report, but I have just been wondering whether it doesn't mean that, almost by definition, if you think you need to deliver a certain volume to what I will call a downstream site for environmental watering, it may be that part and parcel of that, depending upon volume, time and duration, will be that you have to factor in that you will be, thereby, breaking the bank further upstream

MR HARRISS: Unless you can address those constraints in one way or the other.

THE COMMISSIONER: Right. I'm going to ask you about some of that.

MR HARRISS: Yes.

15

20

25

30

35

THE COMMISSIONER: But it really only emphasises – and, I'm sorry, this sounds very obvious – it really only emphasises that it is all about connectivity.

MR HARRISS: Connectivity - - -

THE COMMISSIONER: You can't take water from Dartmouth, as it were, and fly it down from the Coorong without all the connections in between.

MR HARRISS: Absolutely. You can – as has been tried recently, if you have a high river then you can add water to that high river because the water is overbank anyway, so you are going to increase the volume that passes down to reach your environmental asset further downstream.

THE COMMISSIONER: Yes, but it involves the breaking the banks further upstream.

MR HARRISS: Unless some physical infrastructure works are undertaken.

THE COMMISSIONER: Which I'm going to ask you about.

MR HARRISS: Yes. That's right.

- 40 THE COMMISSIONER: I think what I am trying to emphasise is by no means obvious to me that it is in and of itself a bad thing for there to be the river breaking its banks from time to time to cover what are, not coincidentally, called floodplains. But timing - -
- 45 MR HARRISS: Yes.

THE COMMISSIONER: --- duration ---

MR HARRISS: Yes.

5

10

35

40

45

THE COMMISSIONER: --- intersection with lifecycles of other biota and – obviously may make a difference between something which is refreshing or destructive. Is that correct? Have I got it correct?

MR HARRISS: Reasonably so – yes. It's the timing and volumes in particular. One of the things why we have done over many, many decades for constructing large storages – we store the inflows, the natural inflows – particularly the small and medium inflows, and we regulate them for release downstream. What that has done in many of our regulated river valleys is take away the small and medium flood events which would eventuated one in every two years or even more often.

And so by having the releases now which go overbank, you are reinstating some of those moderate to medium floods which is a fantastic outcome to the environment. And, in fact, through the Murray-Darling Basin Commission it was agreed back in 1992 to set aside water for the for Barmah Forest – Barmah and Millewa Forest, because it was recognised they had been denied these floods – regular, minor flooding for many, many years. Those storages can't, sort of, mitigate those huge floods – - -

THE COMMISSIONER: No.

MR HARRISS: --- but they can certainly mitigate many of the midrange floods if you like, small and midrange flows, and the point you made a minute ago that does impact on the larger. There are some species which might only reproduce every five years. So if they are denied a flood for 10 years then you might have localised extinction and, you know, restriction of some of those species.

30 THE COMMISSIONER: Yes. Thank you.

MR O'FLAHERTY: And to follow on, though, from that, the issue of an overbank – water going overbank is an issue of delivery but there will be instances whether that is, in fact, the desired outcome.

MR HARRISS: Absolutely. That's - - -

MR O'FLAHERTY: Was it – was it just – was it a delivery concern at that time or was there an issue about damaging infrastructure and other structures on those floodplains?

MR HARRISS: No, it's so much about damaging infrastructure. It was more about the inability to get volumes from regulated flow downstream. There was no problem, you know, it has happened from millennia – getting large scale floods through those constraints and getting them all the way through to the Mouth – to the Mouth of the Murray, but from regulated flow it will be exceptionally difficult to get the kinds of volumes that were being discussed.

MR O'FLAHERTY: Moving, then, from the Guide to the draft plan, which had the figure of 2,750 as the return to the environment, you make reference to a – in a couple of points that there was a reduction, that the entity, A, determined that that reduction was to be 2,750. Did they explain to the – to your – to the Basin Officials'

5 Committee as to how that reduction was calculated?

MR HARRISS: It was explained. I can't remember the detail of it but it was 50 gigalitres was determined to be necessary within - - -

- MR O'FLAHERTY: Sorry. I will break it up. I will get to the 2,800 to 2,750. But in terms of the figures in the Guide from four to seven, roughly, to the figure in the in late 2011, which was 2,800, what was the explanation was there an explanation given to the difference in those figures between the timing?
- MR HARRISS: Okay. I think I can't recall any specific implication but the 7,000 gigalitres, in my understanding, was never a real figure, it was just what the after a 4,000 gigalitre target came out as what the environment said, "Well, that's nonsense, we need 7,000" and so on.
- MR O'FLAHERTY: Yes, because there was two sets of figures in the Guide, weren't there?

MR HARRISS: Yes.

MR O'FLAHERTY: There was roughly 3,900 to 6,900 as the high uncertainty, low uncertainty figures we have all heard about and then there was the modelled reduction scenarios – three, three and a half, four thousand.

MR HARRISS: Yes.

30

45

MR HARRISS: But you weren't – do I take from your answer you weren't given an explanation as to how those modelled scenarios in the Guide changed from a modelled scenario in the – what we're calling the ESLT - - -

35 MR HARRISS: Yes.

THE COMMISSIONER: --- report of 2011 of 2,800.

MR HARRISS: No, I can't recall the figure. I am certain there was, but there was documentation that came out as well.

MR O'FLAHERTY: Perhaps – was it the case with New South Wales, there wasn't too much concern about the environmental justification for it but it was more the social, economic impacts of the higher figures?

MR HARRISS: Yes.

MR O'FLAHERTY: Or is that a bit unfair?

MR HARRISS: New South Wales had always supported the need for a plan and it had a history of planning through its Water Sharing Plans and through its – ever since the COAG water reforms and the water reforms of New South Wales which were instituted in 1996. We had always considered the impact on regional communities. We were very concerned about the – we wanted the social and economic considerations, but we always wanted the river to be healthy and productive. And that was healthy and productive for its natural features and its natural environment as well as healthy and productive for an economic – for economic outcomes.

MR O'FLAHERTY: And then, moving then, to the reduction of the 50 gigalitres, you talk about following discussions in the northern Basin about – my understanding, and correct me if I'm wrong – is that the relevant production was in one of the Oueensland areas.

MR HARRISS: yes.

20 THE COMMISSIONER: Were you involved in those discussions?

MR HARRISS: No.

MR O'FLAHERTY: Do you know what those discussions entailed?

25

15

MR HARRISS: Not from memory. I think we -I think was almost collegiate where we sit around with the other jurisdictions and discuss these things but I can't recall any specifics.

- MR O'FLAHERTY: Sure. You in paragraphs 13 to 19, you talk about the what I might sorry, 13 to 17, the what I might call the approach to the Water Act. In paragraph 15, you talk about the MDBA at that point were insisting the environment came first. At what point was that? What timeframe are we talking about there?
- 35 MR HARRISS: We are talking from as soon as the Guide came out - -

MR O'FLAHERTY: Sure.

MR HARRISS: --- and including our assessment of the Water Act itself. The
Basin Plan, in our understanding within New South Wales, or certainly within the
Office of Water, was that the Water Act and the Basin Plan provides for the
environment first and foremost. And only after the needs for the environment have
been met do you consider the economic and social outcomes. Which was a bit more
environmentally-focused than what we had been working for previously within New
South Wales unilaterally or with the Murray-Darling Basin Commission with the

45 South Wales unilaterally or with the Murray-Darling Basin Commission with th Living Murray program.

MR O'FLAHERTY: In paragraph 16 you talk about you were – the – when you were saying "we argued" – I'm taking that as a reference to New South Wales - - -

MR HARRISS: Yes.

5

- MR O'FLAHERTY: --- on the Basin Officials' Committee. At that point in time, the consideration of social and economic impacts was that part of that environment first and then social and economic impacts?
- MR HARRISS: That was my understanding of it. We sort of thought, you can't you shouldn't be prioritising one over the other but you should be trying to as we had done previously, getting a balance between the environment, social and economic outcomes and I pointed out in the submission we were also looking at what are the Aboriginal cultural needs as well. And that was actually part of it was factored into the Water Management Act in New South Wales in 2000 the provision provided for cultural flows within the water sharing planning process within New South Wales.
- MR O'FLAHERTY: And sorry, this might seem like a silly question, but is there not a contradiction about in talking about a triple bottom line, in paragraph 17, and the position you describe the MDBA having at that point in paragraph 15 about the environment coming first? Is that are those two positions consistent?
- MR HARRISS: No. We believe the MDBA were providing for the environment first, and the state wanted to provide for all the triple bottom line, if you like, equally. Or considered - -
 - THE COMMISSIONER: If I understand correctly, you regarded the MDBA as taking a position which the Water Act required?

30

MR HARRISS: Yes.

THE COMMISSIONER: And the New South Wales thought the Water Act was

35

MR HARRISS: Certainly, the Basin - - -

THE COMMISSIONER: --- suboptimal policy in that regard.

40 MR HARRISS: Yes. And certainly the Basin Plan was requiring to meet the needs of the environment, focusing on particularly reducing the amount of water which was diverted - - -

THE COMMISSIONER: Yes.

45

MR HARRISS: --- in the first instance, after which you would consider the environment and social impacts.

THE COMMISSIONER: And as a matter of policy New South Wales said, as you are recalling it, "Well, that's the law, but it should not be."

MR HARRISS: It should not be. Yes.

5

THE COMMISSIONER: Thanks. Can I ask you – I'm sorry Mr O'Flaherty, I just want to jump ahead to link something up. In paragraph 30 of your statement - - -

MR HARRISS: Yes.

10

THE COMMISSIONER: When you refer to the identification of hydrological targets, you are simply, as it were, talking about a reduction in the permitted diversions in those areas, in that – in each valley?

MR HARRISS: Not so much so. But it didn't say, "Okay, you are going to reduce the diversions, but you are going to breach the water to reach certain hydrological targets." There were certain flows at particular points which would then – and we say, well, that doesn't articulate what environmental outcome are you – specifically are you going to get. It will provide a hydrological outcome upon which you think an environmental outcome will naturally follow.

THE COMMISSIONER: As you point out in paragraph 31.

MR HARRISS: Yes.

25

THE COMMISSIONER: Yes. Now, I just wanted to – so the hydrological target might be, for example, overbank for 20 days out of 300, or whatever.

- MR HARRISS: Yes. I think a perfect example would be the the flow regime for the Barmah-Millewa Forest, which was developed before the Basin Plan. It said, "If you have a flow in the Goulburn River of this, and you have a certain amount of volume in the Hume Dam of this, then you should make try and reach flows of this, which will inundate."
- THE COMMISSIONER: Now, when you say in paragraph but it doesn't say this is the Plan, but it doesn't say what you are actually going to achieve, at least we didn't believe it articulated that. Were you I take it you were familiar with the notion of environmental watering requirements that had been used to reason towards an ESLT?

40

MR HARRISS: Yeah. Yes, we were. There had been a lot of work done at different parts of the river about what is needed to – for disbursal of blue-green algae. What has been necessary for – to promote native cod breeding and stuff like that.

45

THE COMMISSIONER: Now, are they what you mean by hydrological targets?

MR HARRISS: Yes, that's right. The flow targets, as opposed to - - -

THE COMMISSIONER: I just want to make sure I understand.

5 MR HARRISS: Yes, yes.

THE COMMISSIONER: So the EWRs is what you mean – you include them in what you call hydrological targets?

10 MR HARRISS: Yes. And in fact they could be considered flow targets.

THE COMMISSIONER: But you again, please correct me if I am wrong, I had understood from my reading of them that the EWRs were devised by reference to estimated effects on various forms of life.

15

20

MR HARRISS: Yes.

THE COMMISSIONER: So it's flow, certainly, but time, place, and duration. All with a view to an explicit estimate of how, for example, a Red Gum forest or Blackbutt forest or Murray Cod might respond to those achievements.

MR HARRISS: I think so, but we weren't – I didn't think it was as explicit as much as you state. I think in terms of getting flows

25 THE COMMISSIONER: I'm not giving evidence, fortunately.

MR HARRISS: No, no.

THE COMMISSIONER: But you – you recall, I gather quite clearly that you didn't understand - - -

MR HARRISS: I didn't believe so, no.

THE COMMISSIONER: --- an articulation to that extent.

35

40

MR HARRISS: No. We had, at that stage within the Office of Water, or whatever it was before, we had a scientists who worked on interstate committees and trying to work on fisheries programs and on native vegetation programs, salinity programs, algae programs, and all those sorts of things, and yes, they would come out with a myriad of recommendations, some of which were achievable, some of which weren't. But we didn't – you know, short of going through everything, we didn't necessarily think that they – well, they did underpin, but not explicitly, the fact that – why do we need these flows of such and such at a particular time.

45 THE COMMISSIONER: Right. I understand.

MR HARRISS: Particularly the bigger flows, and it was being suggested then of 70,000 megalitres at the South Australian border.

THE COMMISSIONER: Well, I suppose why I ask I would have thought that in order to address what the statute requires in relation to an environmentally sustainable level of take, you have to look at environmental assets, functions, outcomes.

MR HARRISS: Yes, you did. And back to the earlier point, well, we were looking at that. And they were articulated through flow ratings and they would be looked at first and foremost before we considered what the impact would be on the other parts of the social and economic environment.

THE COMMISSIONER: Thanks.

15

MR O'FLAHERTY: You said – you say in that paragraph the Commissioner took you to that you don't think the Plan articulated that. Did you have any discussions with the Authority about where that might be articulated in their materials?

- MR HARRISS: Yes. We had discussions all the time about that, but I think we were sort of looking at in my position, in particular, we were looking at you know, the higher level things about the 2,750. What is that going to mean across all areas and how is that going to be delivered and what impact is it going to have?
- 25 THE COMMISSIONER: Yes.

MR HARRISS: Because it's almost three-dimensional. It's just one thing to have flows, but at what time, and what volumes are you going to reach? 2,750 didn't state to me how is that going to be delivered over what – you know, is there going to be four gigalitres over three months or 12 months or something like that? And then we were trying to look and say, "Well, if you are going to go overbank in such and such a location, how much water is required for that over what period of time?"

THE COMMISSIONER: As you say, the complexity includes Water Resource Plans to replace Water Sharing Plans.

MR HARRISS: Yes.

THE COMMISSIONER: And obviously what I'm going to call generically operating rules.

MR HARRISS: Yes.

THE COMMISSIONER: Not to mention the plans and ambitions of the holder of environmental water.

MR HARRISS: Yes.

THE COMMISSIONER: And that makes it sound less complex than in fact it is because each of those has within it a myriad of complexity

MR HARRISS: Absolutely.

5

10

THE COMMISSIONER: I have the impression, then, that your recollection of this period of dealings among the officials across political boundaries, was one – was a phase during which New South Wales didn't have any interest in contesting whether 2,750 was enough to be recovered for the environment, rather it feared it might be too much for what I will call "the community" to cop.

MR HARRISS: I think so. Yes.

THE COMMISSIONER: Thank you.

15

30

35

MR HARRISS: We – just to – to say – we had gone through a period of Water Sharing Plans. It was part of our Water Management Act 2000, which required Water Sharing Plans to be determined for every water source throughout the state. And we went through a process of that. We – in each of those plans we set aside water for the environment, and that was two kinds of water in that: there was entitlement water, where an environmental entitlement would have exactly the same characteristics as a high security entitlement or a general security entitlement that the person responsible for managing that could call on, just as any irrigator did, but there was also a provision for planned water, which meant if there was a certain flow into a storage then part of that flow might be released to provide a natural sort of system.

So they – those plans were developed for our major rivers, regulated rivers from 2000 to 2004. I was listening to a Mr Whan talk earlier. That was not an easy feat. There was a lot of conflict, and there was a lot of trade-offs made, but part of that that Water Sharing Plans for New South Wales was included a risk assignment process. We were saying, "Well, if we haven't recovered and we don't get the outcomes that we see environmentally, after the period of 10 years of the Plan, when we do the next iteration of the water sharing plan, we could recover an additional three per cent from entitlement holders without compensation." And that was called the risk assignment model where - - -

THE COMMISSIONER: It's an attempt to actually – to make explicit what I will call a degree of uncertainty.

- MR HARRISS: That's right. So you could I can recall those discussions quite clearly when we were developing it, saying, well, we wanted from my perspective we went and argued for five per cent. The irrigators, the water users particularly, didn't want anything and which was not surprising.
- 45 THE COMMISSIONER: Split the difference.

MR HARRISS: Well, yes. We said I think the response was, "If you can't get a three per cent efficiency dividend over a period of 10 years you're not really trying." Or five per cent. And so, "Yes, well, fair enough, let's call it three." You know, that's very simplified. That's effectively how it came about.

5

MR O'FLAHERTY: In terms of the implementation of return to the environment, in paragraphs 28 and 29 am I right in thinking that you have described there, I suppose, two different ways of apportioning that reduction. The first way is essentially a proportion of baseline, state by state.

10

20

MR HARRISS: Yes.

MR O'FLAHERTY: Whereas the second on paragraph 29 won't necessarily be a proportion of that baseline; it will be contingent on those hydrological indicators and those environmental water requirements such that New South Wales on that scenario might have to recover more than the proportion that you discuss in paragraph 28?

MR HARRISS: Yes. We were concerned that the MDBA or anyone recovering water might focus on recovering that water from New South Wales first and foremost.

MR O'FLAHERTY: Yes.

MR HARRISS: Because we, probably like every other jurisdiction, thought we might become the target.

MR O'FLAHERTY: Yes.

MR HARRISS: So we negotiated through the Basin Officials Committee that, okay, the original recovery of water should be proportional, state by state, on what the proportion of baseline – total baseline diversions would be. In which case New South Wales should typically – or the Basin Plan came up with maybe 49 per cent, Victoria 36, and I think South Australia – this is from memory – said that total recovery should be proportional, but then how that recovery is determined within the state should be what the MDBA specifies for a particular valley has got to be recovered in that river valley but the water over and above that to provide the share downstream requirement should be the consideration of the state. Say for example, these downstream shared requirement in the Murray, I can't remember the number off the top of my head - - -

40

MR O'FLAHERTY: So is this an – forgive me if I completely bark up the wrong tree, is this what we are talking about when the Plan talks about the SDL resourcing at shared reduction amount?

45 MR HARRISS: Yes.

MR O'FLAHERTY: Where it selects out different part –zones and in New South Wales there's a southern Basin New South Wales zone of a reduction of 458 gigalitres per year?

5 MR HARRISS: Yes, I think from memory that's right. And it was up to New South Wales to determine how that could be apportioned.

MR O'FLAHERTY: Among the SDL resource units?

10 MR HARRISS: Yes.

MR O'FLAHERTY: Right.

- MR HARRISS: Within New South Wales. Say for example, if we were to achieve a water supply measure of Menindee Lakes of, just notionally, 100 gigalitres, then you wouldn't provide all of that from the Lower Darling because we didn't have that much entitlement up there. You would share it across the Murrumbidgee, the Murray and Lower Darling, which contributed to the downstream flow.
- THE COMMISSIONER: You can skin that cat in a number of different ways. I've not read much, if anything, suggesting that that's a live controversy now, is it?

MR HARRISS: No, because I don't think we have reached that stage where it's been determined how that additional reduction is to be met.

25

THE COMMISSIONER: Theoretically in the middle of 2019 we will have that, won't we?

MR HARRISS: Presumably 2019 or 2024.

30

THE COMMISSIONER: Because won't the - - -

MR HARRISS: Probably 2024. Depends on how – at the moment, the latest figures we were – I was given at a meeting about a month ago by New South Wales, with the MDBA there, they said the recovery of water to meet our contribution to the 2,750 in the southern part of the New South Wales – the southern Basin – excluding the potential 605 down, and the 405 has been met. So in my mind that means that if the 605 downwater is then recovered through projects then the difference has got to be determined, within New South Wales valleys, how that is apportioned between the valleys. And that will be a debate between water users and government within the Murrumbidgee, Murray and the Lower Darling in New South Wales.

MR O'FLAHERTY: Taking that example you have just given, you – the approach in paragraph 29 would still have to take into – be taken into account, wouldn't it, not – where you couldn't apportion that share reduction out so as to not meet the environmental watering requirements of a particular area?

MR HARRISS: The environmental water requirements were determined by the in river component. As opposed to the share downstream component. So we are assuming that those environmental requirements are met.

5 MR O'FLAHERTY: Right.

MR HARRISS: Okay.

THE COMMISSIONER: When all the Water Resource Plans are made, in theory they identify, "they" by valley, the contribution to the required recovery.

MR HARRISS: That, in theory that is the case. In fact, we were responsible for redoing the Water Sharing Plans in New South Wales in 2014. But that had been overtaken by the need to do Water Resource Plans in the valleys within the Murray-

- Darling Basin by 2019. My advice at that stage as the Commissioner, or before that, was the review of our Water Sharing Plans, we call them a small r review. We shouldn't do too much to fiddle with them if we are only going to have to completely renew them by 2019.
- THE COMMISSIONER: What are the chances of it being done by the required date in 2019?

MR HARRISS: I haven't been involved since 2014, so I haven't noticed the progress of it. The feedback I've got is they have only got two about to be completed now. I went to a meeting where they said, "Well, you haven't even discussed it with the community properly for those two."

THE COMMISSIONER: Because it's less than 12 months, isn't it, to - - -

MR HARRISS: Yes. So to get to your point, I would think there's not much chance of getting a comprehensive resource management plan for each of the respective water sources in the basin by 2019.

MR HARRISS: As I said, I haven't been involved, so I may stand to be corrected.

THE COMMISSIONER: Yes. All right.

35

THE COMMISSIONER: Your caution is noted and appreciated.

MR O'FLAHERTY: I just wanted to circle back to the discussion you had about interpretation of the Water Act. I think you said that the – and correct me if I am wrong – it was a NSW Government position at the time of the Water Act required that prioritisation of the environment or was that just a personal view that you reached?

MR HARRISS: No. It was a view we had within the Office of Water. At that stage we had our own legal section - - -

45

MR O'FLAHERTY: Yes. I was going to ask you - - -

MR HARRISS: --- which was quite substantial and they were in rooms just outside of my office. We would just frequently go around and sort of discuss things without it being formally, but I think it was generally considered that the Water Act, in particular the Basin Plan, required consideration of environmental outcomes prior to the social and economic. And, as I think I've mentioned before, that in previous meetings that like every jurisdiction we were asked to – well, "What options do we have?" And you would normally say for, you know, political masters, well, what are the options: provide advice. And that goes from the sublime to the ridiculous for want of a better expression, that – you know, some of the things like, well, perhaps

MR O'FLAHERTY: The arguable to the unarguable.

15

10

5

MR HARRISS: That's right. "Can we challenge the Basin Plan, you know, the legitimacy of it in the first place?" And, you know, there were different opinions of whether it was legitimate or whatever, but then it comes back, "Well, why would we do that anyway?"

20

MR O'FLAHERTY: I wanted to briefly touch upon that part of your statement that talks about groundwater SDLs.

MR HARRISS: Yes.

25

MR O'FLAHERTY: And I just wanted to clarify, was it – it was the case, was it not, that the New South Wales Government and your office had quite a substantial understanding of these groundwater aquifers that wasn't replicated in the MDBA's understanding?

30

- MR HARRISS: We don't we don't we don't believe it was replicated. The in particular, there were two aquifers, the western porous rock which effectively goes from Deniliquin to the South Australian boarder, and the eastern porous rock, which is further north, had substantial capacity for further extractions. The policy in New South Wales, the overriding way we determined our plan limits for our water sharing
- South Wales, the overriding way we determined our plan limits for our water sharing plan for ground water was to determine what is the state of what is the capacity of the aquifer. What is the recharge of that aquifer, long term average annual recharge.
- 40 MR O'FLAHERTY: And recharge, is that a reference to the connectivity between the groundwater and surface water?
- MR HARRISS: No, no. Well, it can be. For example, in the great artesian basin there's along northern New South Wales, there is a recharge. The rain hits, floods occur, and it recharges that basin which has been recharging for millennia. So but getting back to the policy was you try and work out what is the capacity of the aquifer itself, what is the average annual recharge, and then we would allocate a

proportion of that recharge. And we believe that we had not allocated anywhere near the amount of recharge for the western porous rock aquifer, which by the way was saline, and there could be a lot more extraction of that water. Now, that was not for irrigation, but we said, look, there were mineral sands developments out in the western part of New South Wales that required water for washing. It didn't matter if it was saltwater or fresh water, so we were saying, well, why would you - - -

MR O'FLAHERTY: So this was extraction for environmental watering purposes?

10 MR HARRISS: No, this was an extraction for - - -

THE COMMISSIONER: That's industrial purposes.

MR HARRISS: --- industrial purposes.

15

5

MR O'FLAHERTY: Industrial purposes, sorry.

MR HARRISS: And we were saying, why should we limit potential industrial development, whatever it may be, over the next 40, 50, 60 years, because – or why would we force them to go on to the market where the only extraction at that stage really was for salt interception schemes.

THE COMMISSIONER: There is groundwater and groundwater.

25 MR HARRISS: Yes.

THE COMMISSIONER: Could you explain to me the last sentence of your paragraph 33? Is that a reference to

30 MR HARRISS: Yes. And that's what I'm saying, that - - -

THE COMMISSIONER: That's a reference to using – taking the saline water from the aquifer - - -

35 MR HARRISS: Aquifer and using it.

THE COMMISSIONER: --- and using it in industry.

MR HARRISS: Yes.

40

THE COMMISSIONER: In such a way that it ought not, as it were, count in relation to recovery of water for the environment.

MR HARRISS: It wasn't going – we didn't believe it was going to impact on the environment of that water source at all. Any further extraction.

THE COMMISSIONER: Now, is that not something that can be dealt with by an appropriate WRP?

- MR HARRISS: Our understanding was the WRP must be consistent with the SDL that has been determined within the Basin Plan. We said the SDL within the Basin Plan for those aquifers was not scientifically thought through and had capacity for more. So do not - -
- MR O'FLAHERTY: That's a reference in paragraph 32, they were essentially what was being extracted at the time, your point is they could have been an increase in the SDL from you.

MR HARRISS: A lot more.

15 THE COMMISSIONER: I understand that. Thank you. Mr O'Flaherty, would you mind if I move to the Menindee Lakes.

MR HARRISS: Certainly – certainly not.

20 MR O'FLAHERTY: I was - - -

THE COMMISSIONER: Just a couple of things just to clear up detail first. We talk about Lake Wetherell. Am I correct it's really a sort of semi regulated part of the river?

25

MR HARRISS: Yes. Lake Wetherell is along the Darling River, the main Menindee Lakes weir has been installed. It raises the river level by 14 metres. That's the weir.

30 THE COMMISSIONER: We call that Lake Wetherell.

MR HARRISS: We call that Lake Wetherell. What it does, that has increased the level to the point it inundates four other smaller lakes and the adjacent floodplain which is bounded by a constructed levee. So that is more an artificial lake, if you

- like, Lake Wetherell is an accumulation of the lakes and the floodplain. By lifting the river that high it forces water down into Lake Pamamaroo, which in turn forces water down into Lake Menindee, which in turn water can spill and fall into Lake Cawndilla by gravity.
- THE COMMISSIONER: Whereas it doesn't go anywhere at the moment, apart from Tandou from Cawndilla.

MR HARRISS: And to the great Anabranch for environmental purposes.

45 THE COMMISSIONER: At a certain level it will spill into the Anabranch branch.

MR HARRISS: Never did naturally. Back in the 1950s and 60s during the construction of the Menindee Lakes there was a channel built on the southern end of Lake Cawndilla, with a regulator to enable water to be diverted down into Tandou Creek which then – Tandou Creek was a natural offtake from the Darling River south of Menindee which flowed to the Anabranch. So you had the natural – you had two creeks, Redbank creek and Tandou Creek downstream of the Menindee Lakes and the Great Darling Anabranch, which – offtakes, they all flow to the west of the Darling River.

- THE COMMISSIONER: I'm particularly interested in what you say in your paragraphs 52 and 53. Have I understood this correctly: the resource, or the storage, at the Menindee Lakes can be envisaged as operating together with Lake Victoria?
- 15 MR HARRISS: Yes.

THE COMMISSIONER: Which, is of, course downstream of the Barmah Choke.

MR HARRISS: Yes.

20

5

THE COMMISSIONER: So as to provide a resource, either potentially or when needed actually, to assure, in particular South Australian irrigators and other consumptive users, of in particular summertime supply.

- MR HARRISS: South Australia has the only legal entitlement to water under the Murray-Darling Basin Agreement. The inflow into the Hume and inflow into the Menindee Lakes is typically shared fifty-fifty between Victoria and New South Wales there are a couple of anomalies in that from which New South Wales and Victoria must supply their proportion of South Australia's entitlement flow. That
 - THE COMMISSIONER: This long, long predates the Basin Plan.

MR HARRISS: Very much so. And that can be - - -

35

MR O'FLAHERTY: This is the Murray-Darling Basin Agreement currently, isn't it?

MR HARRISS: Yes, that's right. That's - - -

40

45

THE COMMISSIONER: It has a history before that, as well.

MR HARRISS: That's right. It's been around a long, long time. I think it was fundamental in the development of water sharing arrangements going back as far back as 1917.

THE COMMISSIONER: Now – so what I've suggested to you correct - - -

MR HARRISS: Yes.

5

10

35

40

THE COMMISSIONER: --- the importance is they function as a reservoir which can be called on, in conjunction with Lake Victoria, so as to meet the position achieved when South Australia needs or can demand its delivery, particularly in summer, but supplying it from the Murray is constrained by the Barmah Choke.

MR HARRISS: That's correct. That's absolutely correct. What normally happens is water will go in and fill Lake Victoria during the winter and spring. Naturally, through tributary inflows, which are - - -

THE COMMISSIONER: Revealing my terrible ignorance, I've now forgotten things I've read. Is Lake Victoria completely artificial or just artificially augmented?

MR HARRISS: No, it's a - no, it is a natural lake.

THE COMMISSIONER: Yes. Has it been augmented?

MR HARRISS: It had been regulated since 1928, so that water can be passed into it from the Murray through natural channels, which are actually within weir pools, so water can be forced in there that would not otherwise go in under natural conditions. But typically you fill Lake Victoria during the winter and spring months, and then that can provide – or contribute to South Australia's entitlement flow during the course of the summer and autumn months. That – back in 1996, when construction works were being – maintenance works were being undertaken and regulated in Lake Victoria there were numerous burials found which had to be considered, and subsequently there are rules for the operations of Lake Victoria that requires water, when it's being stored and released, to go through that area where – can cause erosion damage to the burial sites and the foreshore to make sure it happens very quickly.

So again it's not just a matter of filling up a storage and releasing it, you have got to factor in those considerations as well. And the point I'm making is whilst it would usually be filled from high flows, if those high flows don't eventuate it – water is released from the Menindee Lakes to make sure that water is in Lake Victoria to meet the coming summer demands.

THE COMMISSIONER: The high flows that are – usually fill Lake Victoria are what might be called natural high flows, are they?

MR HARRISS: Yes. Tributary – typically tributary inflows which are – which are over and above South Australia's daily requirement. So they are put into meet South Australia's daily requirement subsequently. That's - - -

THE COMMISSIONER: Do they happen to be tributaries from the south or the north or both?

MR HARRISS: No, typically from the southern Basin.

THE COMMISSIONER: I know from the southern Basin, but from the Victorian side or from the New South Wales side?

5

10

MR HARRISS: The water from the Victorian side is accounted in Lake Victoria as water from Victorian water up until the lake is 50 per cent full. Typically if the inflows couple out of the Murrumbidgee and nothing out of the Victorian tributaries, they would go in and be accounted for as New South Wales water. But neither jurisdiction can own more than half of the volume in that lake. So if more water came in from the Victorian side, and their 50 per cent was already full, it would spill into New South Wales.

THE COMMISSIONER: So when we talk about Lake Victoria being the property of South Australia, we are not talking about the water, but we're - - -

MR HARRISS: No. We're talking about the land.

THE COMMISSIONER: --- talking about what I will call the infrastructure.

20

MR HARRISS: They own the land, just like I could own land - - -

THE COMMISSIONER: Thanks.

MR HARRISS: And that makes them subject to New South Wales law, just as anyone else is.

MR O'FLAHERTY: I wanted to explore this particular supply measure in as much detail as I'm going to be able to understand it. And to do so I might want to just take you through the business case for the Menindee Lakes supply project.

MR HARRISS: Okay.

MR O'FLAHERTY: Can Mr Harriss be given the court document for Menindee Lakes?

MR HARRISS: I will just make the Commission aware that I have not seen a copy of this business case. I have seen a copy of a draft.

40 MR O'FLAHERTY: You have seen a copy of an earlier version, I think.

MR HARRISS: And earlier version which was not necessarily formative.

THE COMMISSIONER: Weren't you told you were going to be tested on your speed reading?

MR HARRISS: Sadly I used to have staff to do that. Not anymore.

MR O'FLAHERTY: I just wanted to – if you could go to tab 2 in that folder.

MR HARRISS: Yes.

5 MR O'FLAHERTY: Which is a business case there, on page 23.

MR HARRISS: Yes.

MR O'FLAHERTY: That table there, storage capacity, just so I understand it, we've got what's called a full supply volume and full supply level and then we have a surcharge capacity. Do those – does the full supply volume, how does that interact with what's called the dead storage volume? Well, first of all, what's meant there by the "dead storage"? That's the amount of water that can't be - - -

15 MR HARRISS: Can't be taken out.

MR O'FLAHERTY: --- taken out, yes.

MR HARRISS: So when you have reduced – released as much water as you possibly can there is usually a special volume somewhere in the bed of the lake which cannot be accessed.

MR O'FLAHERTY: Yes. And do I take it that the difference between the dead storage height and the full supply level, that's what we might call the depth of the lake, or the depth of the extractible portion of the lake.

MR HARRISS: Yes. Effectively, yes. We never really dealt with dead storage in terms of height, it was always in terms of the volume.

30 MR O'FLAHERTY: Sure, yes.

25

45

MR HARRISS: Because it was the volume that was important.

MR O'FLAHERTY: Certainly. Moving to page 31, the discussion about the – what is, I think, the current operational arrangements.

MR HARRISS: Yes.

MR O'FLAHERTY: I just wanted to take you to the bottom part of that page with A through E, talking about the chapeau to that is "the lakes filling strategy is therefore as follows". Do I understand that you – translating that is you fill the top lakes to their full supply volumes first - - -

MR HARRISS: Yes.

MR O'FLAHERTY: And then once you have reached that, then you then fill the top lakes with their surcharge.

MR HARRISS: Not necessarily. You fill, as it says – you fill the top lakes to their full supply capacity, then you allow water – depending on the circumstances – to pass into the bottom lakes, Lake Menindee and Lake Cawndilla, and it's during flood flows that you actually surcharge the lakes. But when - - -

5

MR O'FLAHERTY: This is in E, is it?

MR HARRISS: Yes, that's in E.

10

MR O'FLAHERTY: This is when you've got high flows going down?

MR HARRISS: High flows, you can surcharge. The history of that is when the lakes were constructed in the 50s and 60s they were constructed to hold, I think it's about 2,485 gigalitres. Okay?

15

20

MR O'FLAHERTY: Yes.

MR HARRISS: So they were substantially higher. The outlet regulator we talked about from Lake Cawndilla, in – which was constructed, blew out and water was released. So they did repair works to that and they reduced the height of the Lake Menindee and Lake Cawndilla in the '60s because of fear of further damage from blowouts. Over many years there were a lot more structural works done to strengthen the outlet regulators and the infrastructure, and, again, the levels were increased during the '80s back to the nominal full supply levels.

25

30

35

Then we found that that was having enormous erosion problems on a settlement called Sunset Strip north of the – on the northern bank of the Menindee Lakes and, again, in 1996 when we discovered the burials in Lake Victoria we also noticed there was portional erosion and damage to burials being done at the Menindee Lakes. So the levels were again reduced. So they get reduced down to the levels nominated

I can – I grew up remembering them in the old empirical days, you know, they went from 207 foot down to 202 foot. Now, in the Menindee, it has come up to 204 foot but there was potential during the flood to take them up another foot, a foot and a half to bring them down reasonably quickly to get the pressure off the infrastructure. So that and Lake Burrendong near Dubbo, the only water storage in New South Wales in land which has capacity for flood mitigation to that effect.

- 40 MR O'FLAHERTY: And so the current infrastructure or main structure on the Menindee Lakes – there is a schematic diagram on page 21, which is – I take it is operated to facilitate that filling strategy where you have got a weir – the weir on Lake Wetherell and regulators linking that lake to the Pamamaroo.
- MR HARRISS: Yes. 45

MR O'FLAHERTY: And then you've got the connections to Menindee to Cawndilla.

MR HARRISS: Yes

5

MR O'FLAHERTY: And then you've got the outlet on Menindee and Cawndilla as well.

MR HARRISS: Yes.

10

MR O'FLAHERTY: And the one that you mentioned that blew out at the Cawndilla outlet regularly that needed to be remediated.

MR HARRISS: That's correct. Just for your information, the Menindee outlet regulator would also have been the natural inflow to - - -

MR O'FLAHERTY: Yes. There's a – as natural creek to the river.

MR HARRISS: As a natural creek. It would not have been connected to Lake
Pamamaroo but would have been connected naturally to the Darling River. As, in fact, through a creek from the Darling River.

MR O'FLAHERTY: That's because is an artificial construction.

25 MR HARRISS: That's right. Yes.

MR O'FLAHERTY: And so it would have naturally filled and been drawn down through that connection to the Darling where the regulator is currently.

MR HARRISS: Naturally filled to a certain level. And if inflows continued then that would spill through that – the diagram connection between Lake Menindee and Lake Cawndilla into Lake Cawndilla. Then, on the flood recession, water would pass out of Lake Cawndilla into Lake Menindee down to that silt level and then it would pass from Lake Menindee back to the Darling River down to the level of the

and natural outlet. And that would take quite some time.

MR O'FLAHERTY: Do I take it then, is Lake Cawndilla slightly higher than Menindee?

40 MR HARRISS: No, it is downstream.

MR O'FLAHERTY: It's downstream.

MR HARRISS: It's lower, but it's deeper.

45

MR O'FLAHERTY: Yes, okay.

MR HARRISS: And that would be in the - - -

MR O'FLAHERTY: Yes, I think it's probably reflected in those AHD - - -

5 MR HARRISS: Yes. But they do share the same full supply level, because it's now an artificial connection for us.

MR O'FLAHERTY: Yes. It is about 630 gigalitres each, according to that table on page 33. That second column.

10

MR HARRISS: 630.

MR O'FLAHERTY: Yes. Moving, then, to the proposal in this supply project, perhaps sticking with that diagram, because there is a – a picture on page 35 of this but, for the life of me, I can't read the rather fuzzy writing on that. And there's – so I don't think we will strain our eyes too much to try to and read that. Page 36 describes 13 measures, but am I right that the major points to take home from this supply measure project is that there's an enlargement of that regulator – the Menindee outlet regulator – and a regulator between Menindee and Cawndilla as the major aspects of the supply measure proposal. Is that fair or is that - - -

MR HARRISS: No, that's true.

MR O'FLAHERTY: And - - -

25

MR HARRISS: These infrastructure changes have been discussed for decades to improve the efficiency of the lakes as a storage. There is effectively net two metres evaporation out there. So if you can reduce the surface area and reduce that evaporation, you can achieve significant water savings.

30

MR O'FLAHERTY: Yes. And I'm going to take you to an article that you've written in 1994 which demonstrates that this has been a discussion. And I am right, and you said that the major reason for looking at reconfiguring these lakes is the evaporative losses.

35

MR HARRISS: Yes. As waters storages, to provide water for consumptive use, you try and maximise the water that can be stored.

MR O'FLAHERTY: Yes. And you – sorry, and so the rationale behind this particular proposal is, and if I am right in summarising it fairly obliquely, is essentially draining the lake – lakes quickly or more quickly so that the water isn't in those shallow basins from a long period of time so it can evaporate from them. Is that - - -

45 MR HARRISS: That's right. Two aspects to that.

MR O'FLAHERTY: Oversimplification, I know, but - - -

MR HARRISS: No, not really. It's two aspects to it is to take the water out immediately to meet environmental needs downstream and that, in so doing, also reduced the surface area and make those water savings.

5 MR O'FLAHERTY: Yes. As a result of that, I think you make the point that – or implicitly you make the point that that requires, essentially, drying out or not using Lake Cawndilla as a reservoir as much as it currently is.

MR HARRISS: "As much as it currently is", absolutely. In the – as I have pointed out before, there has been numerous looks at how can you improve the efficient management of the Menindee Lakes over many decades. One of the proposals, which we undertook more recently was called the Darling River Water Savings Project, which identified six options. And one of the options, which was, at that stage, preferred by the Commonwealth Government, was to actually isolate both Menindee – Lake Menindee and Lake Cawndilla.

And New South Wales, at that stage, completely disagreed with that for two reasons. We weren't prepared to look at the death of those lakes which are – they are on the inventory of important wetlands in Australia in their own right. But we also believed that whilst it might provide water for the environment downstream, if you started dry sequence and you effectively had more than half the capacity of this lake as a water self-storage, you have lost your drought reserve. You know, the bottom principle is that if you start a dry sequence – and that dry sequence might start tomorrow – it is best to start with four full lakes than two full lakes. You know, we didn't think that was terribly difficult.

MR O'FLAHERTY: That was the proposal to essentially cut off Menindee and Cawndilla. You say in paragraph 50 of your statement that you don't support the drying out of Cawndilla. I take that to mean that you don't support that aspect, at least, of this supply measure. Is that the same reasoning behind that?

MR HARRISS: The implication there is not support the drying out forever of Lake Cawndilla. There should be certain flows like Lake Cawndilla, like any of the lakes, filled and dried naturally, but it needs – and it's enormously significant for both the environment and cultural values of it and so there should be a regime which allows water, during the course of a high flow event for an extended duration, to pass in and fill that lake.

THE COMMISSIONER: That's the kind of matter which would be at the heart of an environmental impact study and statement.

MR HARRISS: I would have thought, yes. And I would be prepared to say, since then the completion of Menindee lakes as water storage, Lake Cawndilla has had more water in it, more frequently for longer periods than it would have had naturally. So there is plenty of scope to reduce the amount of time it has water in it and for what duration, but I think it would be totally inappropriate to dry it out forever.

20

25

30

35

45

There is a regime, as I pointed out in my – the environment is very resilient but these provide enormous drought refuge for all of the biota. I think a recent publication by Fisheries pointed out the values of the lakes for fish recruit and breeding. So you know, my personal opinion you don't sacrifice one perfectly functional environment to meet the requirement of another. It has to be balanced, but - - -

THE COMMISSIONER: Yes. It doesn't strike me as being at all straightforward environmental impact exercise, this one.

MR HARRISS: No, no, no. And because of the nature of Lake Cawndilla as I pointed out, it filled on high flow – very high flow – from Lake Menindee and it was deeper. So it was the lake which held water during a drought longest. As a consequence, that's where you will find much of the Aboriginal relics and burials and those sorts of things. So it's a very significant lake, not only environmentally but culturally.

THE COMMISSIONER: Culturally, yes.

MR HARRISS: I have been privileged to see some very, very significant sites of cultural significance.

THE COMMISSIONER: Well then, as I read the business case material, it's not clear to me what's proposed for Lake Cawndilla in events of major natural floods.

25 MR HARRISS: As I said, I have not read this document right through.

THE COMMISSIONER: You mean you haven't read it as we have been speaking?

MR HARRISS: No, I'm sorry.

30

40

5

THE COMMISSIONER: Thank you. No.

MR O'FLAHERTY: Having read it I don't think I can understand - - -

35 THE COMMISSIONER: Would it be asking too much, because you have got such knowledge of these matters, would it be asking too much if we could be in correspondence with you about matters such as I've just raised? How you read the business case in terms of Lake Cawndilla in the event of the kind of high flow that it would in nature have filled it?

MR HARRISS: I would be happy to do that. But I can recall that there was work done many years ago by a geomorphologist called Martin Toms who undertook an assessment how often water would ... Lake Cawndilla.

45 THE COMMISSIONER: Yes. Thanks.

MR HARRISS: And that's really drawing on my memory. I'm sorry.

MR O'FLAHERTY: I think, on page 9 of this document, there is at least a broadbase statement in – I will let you get to it – in paragraph A.

THE COMMISSIONER: In all but the wettest years.

5

MR O'FLAHERTY: In all but the wettest years. It doesn't explain percentages. Now, I've – there are some materials that have been published which seem to suggest – and I'm not sure this is part of the pack there, but in about 30 per cent – sorry, about 70 per cent of years it would be decommissioned. And 30 per cent would have at least some portion of water in it.

THE COMMISSIONER: So obviously the – that needs to be studied.

MR HARRISS: Yes.

15

10

THE COMMISSIONER: And some judgments made for the environmental impact statement.

MR HARRISS: And there has been a lot of work done on this over many, many years. I can – there was a study done in my history when the New South Wales Government changed in 1996 – under the Carr Government we were given instructions to look at all options available to management of the Menindee Lakes. There was a subsequent report done – I think it was called the economic – sorry, the ecological or environmental sustainable development program, which was a very comprehensive study and I would think would contribute significantly to the future EIS and maybe some of that work has already been previously undertaken. And I think it might have been in that study that the work of – I think it was Professor Martin Toms – looked at how what would be the natural frequency of flooding. I'm certain he did what would be the natural frequency of flow down the great Anabranch.

MR O'FLAHERTY: Yes.

MR HARRISS: Because what people don't realise that at the turn of the last century it was dug out by a couple of metres, which would impact the amount of times it would flow.

THE COMMISSIONER: Would you mind – just to try to put that in some statutory context – in the Basin Plan, in chapter 7, which is the adjustment of SDLs, which is what the Menindee project is to contribute to, benchmark conditions of development is defined to mean the conditions of development that were assumed in the benchmark model described in schedule 6 where the model was used to set the unadjusted SDLs for the Basin Plan. And we can take it, can't we, that those benchmark conditions of development included the Menindee Lakes in their current configuration and operation?

MR HARRISS: Yes.

THE COMMISSIONER: Then we go back to the process by which amounts of adjustments might be determined, including in response to what are called supply contributions, which are the possible adjustment amount produced by supply measures, of which the Menindee proposal is one.

5

10

15

20

MR HARRISS: Yes.

THE COMMISSIONER: And it says that the supply – the applicable criteria, which under 720 must be met to the satisfaction of the Authority before there can be an adjustment, include for supply contributions that they achieve the equivalent environmental outcomes compared with the benchmark environmental outcomes. I'm sorry to play word golf with the definitions, but that takes you to what that expression means, and benchmark environmental outcomes mean the environmental outcomes in the model that, in accordance with the applicable method, would be achieved if the SDLs at the levels set at the Basin Plan were commenced and the benchmark conditions of development applied to the Murray-Darling Basin. So through that thicket of words, you see that environmental – equivalent environmental outcomes require that the supplier contributions achieve those outcomes compared with, in effect, what would have happened if you didn't carry out the supply measure.

MR HARRISS: That's correct. That's my understanding.

THE COMMISSIONER: You can't – a supply measure won't qualify to make a supply contribution to an adjustment of the SDL if its environmental outcomes are worse for the environment than if the supply measure had not been carried out.

MR HARRISS: As determined by the model.

30 THE COMMISSIONER: Certainly. Certainly. I'm not suggesting that - - -

MR HARRISS: No, no - - -

THE COMMISSIONER: --- there's any accurate or precise crystal ball here. So it's scientific and judgmental, unquestionably, and it is all ultimately requiring the Authority to be satisfied.

MR HARRISS: --- that's certainly my understanding, and they will assess those

40

THE COMMISSIONER: Just offhand, and this may be underlining your earlier comment about questioning several trade-offs between different

MR HARRISS: Yes.

45

THE COMMISSIONER: Offhand, I am really struggling to understand how there could possibly be equivalent environmental outcomes, in the sense I've just asked

you about, for the Menindee project. That is, no doubt we can and will spend a lot of money investigating it, but isn't it really easy to see that they won't be equivalent?

MR HARRISS: They will be oranges and lemons. If you can get a flow from Menindee - - -

THE COMMISSIONER: Sometimes oranges and lemons are pretty equivalent, but no - - -

10 MR HARRISS: Well, the - - -

THE COMMISSIONER: Aren't they more likely - - -

MR HARRISS: Or oranges and apples, whatever. Okay, so if you – I presume the MDBA model will make an assessment on what they believed environmental outcomes are. Now, you may make releases from the Menindee Lakes to achieve a flow level which would – at the South Australian border which would otherwise be not achieved, and that will provide an environmental benefit.

20 THE COMMISSIONER: Yes.

MR HARRISS: And that will - - -

MR O'FLAHERTY: Is that sort of like a trade-off? That you have an environmental detriment in the Menindee Lakes and an environmental benefit at the border of South Australia.

MR HARRISS: Yes. That's right. But as I mentioned before the natural environment of Menindee Lakes has been changed now, so you can probably change it a bit to take it back to filling and drying more frequently and have an environmental improvement. Now, I am not – I do not understand at all what the environmental – was included in the environmental equivalence model.

THE COMMISSIONER: Well, I don't think there has been one done yet, has there?

MR HARRISS: There is a model that the MDBA run.

THE COMMISSIONER: How do you do that without an environmental impact investigation?

MR HARRISS: Well, I will – you would challenge their model and say, "Well, how does that work and how do you get – you know, what is the equivalents you are getting from the benefits received for high flows downstream, compared to the potential losses?" And like I said, I have no understanding of models. I – quite often

45 ---

35

40

MR O'FLAHERTY: But in terms of an environmental impact, there are risks – there are environmental impacts which are somewhat obliquely identified in these documents in – there's a risk matrix and there's a – what they call a heat map. Much of it being red. But I don't see any – like, maybe it might be easier if I take you to it.

For example, if you go to page 110 of this document, and again, I – well, I'm not going to apologise, because this is not my document, but this is incredibly hard to read the table. But if we were to say for example on 810, go to the third line, which talks about impact to threatened species due to altered hydrology.

10 MR HARRISS: Yes.

MR O'FLAHERTY: That's got an orange inherent risk rating, which I think is high in their parlance, red being extreme. The - - -

15 THE COMMISSIONER: I'm sorry, that's described as a possible - - -

MR O'FLAHERTY: Possible inherent risk likelihood.

THE COMMISSIONER: And it's a major inherent risk consequence. How do I read the ratings, I'm sorry?

MR O'FLAHERTY: Earlier there is a – on page 76, Commissioner, is a explanation of this risk matrix.

25 THE COMMISSIONER: So this is what, A12 in - - -

MR O'FLAHERTY: Yes, so it is major and possible.

THE COMMISSIONER: So in the risk matrix, table 16, A12 is – what – moderate consequence and likely to happen.

MR O'FLAHERTY: We have got "possible" and "major" here, as well as a - - -

THE COMMISSIONER: I know. That's why I'm just - - -

MR O'FLAHERTY: So yes, it's - - -

THE COMMISSIONER: That's why I'm asking, why is it called A12, when that's moderate consequence and the likelihood is likely?

MR HARRISS: So - - -

35

40

THE COMMISSIONER: Well, I obviously can't read the table.

45 MR O'FLAHERTY: I guess because it is more likely, even though it's a lower consequence, it still has a high risk rating. Whereas a less likely consequence, but

more – it would be more detrimental, being a major is also a high rating. That's how I think I read it.

MR HARRISS: The way I've worked with these over many years is they have identified what the description – the description of say – for example, they have got impacts on threatened species due to altered hydrology.

MR O'FLAHERTY: Yes.

- MR HARRISS: That's an environmental risk. So that's possible. This is in A12, the second the middle column, the grey shade. What what's the consequence of that? The consequence is major. So you then go across to the next column, say, "Well, what can be done to mitigate that?"
- 15 MR O'FLAHERTY: I was going to ask you - -

MR HARRISS: Yes. And then - - -

25

30

40

MR O'FLAHERTY: This essentially says adverse impacts to be assessed and mitigated.

MR HARRISS: That's right. And then what is the potential outcome after doing that mitigation, which is the next column, which says well, it's still moderate environmental consequences. So effectively: what's the issue, what's the likelihood of that risk, what's the consequence of the risk, can it be mitigated, if the mitigations are effective then what's the consequential risk? The residual risk?

THE COMMISSIONER: But doesn't that table tell me, in effect, that something will have to be done about it through extensive EIS and EMP? Remind me what EMP is?

MR HARRISS: Environmental management plan is my understanding.

THE COMMISSIONER: I thought so. So that's a table that says you will mitigate this risk if you do an extensive EIS and act in accordance with an EMP.

MR HARRISS: Yes. It will be identified in the environmental impact statement and as will be what is the potential capacity to mitigate and what will it be, and how will that - - -

THE COMMISSIONER: I don't want to be too rude to the authors of this table, but that's saying it will be found out whether this risk can be mitigated, or not, in the future.

45 MR HARRISS: Through those processes, which I've said a lot has happened before in Menindee Lakes, will be identified, well, can you do something about it.

THE COMMISSIONER: Well, there has been no EIS for this proposal. Believe me, I can tell you that.

MR HARRISS: I know there is no specific EIS for this proposal, and my recommendation would be there has been – as I said in my statement, it would require an EIS, but there has been an enormous amount of work done over many, many years which would contribute to that EIS as well.

THE COMMISSIONER: I have no doubt. Absolutely. It's a frequent endorsement in this table that says the risk mitigation will be through extensive – extensive EIS and EMP. Yet to be accomplished.

MR HARRISS: Yet to be accomplished, yes.

15 THE COMMISSIONER: Doesn't that mean you don't know whether it will be mitigated? Or mitigatable?

MR HARRISS: I think with my understanding, setting aside the table, as I said, you can probably get some positive environment outcomes or ecological outcomes by reinstating the natural filling and drying cycle.

THE COMMISSIONER: I find that very interesting, and I must say it has been something that has puzzled me for a while about this. That's why I asked you about the definitions. The benchmark conditions of the development seem to require you need to go to what was in the model, which is the configuration as it was operating, or as it operates now. Yes.

THE COMMISSIONER: You don't go back before the 1960s.

30 MR HARRISS: No, that's right.

20

25

45

THE COMMISSIONER: Perhaps you should, for Menindee.

MR BEASLEY: Sorry to interrupt, Commissioner, but we need to remember the Basin Authority is asserting, in relation to the Menindee Lakes, has nothing to do with the environmental. They are saying it's outside the environmental it's outside of the SDL framework for testing environmental equivalent environmental outcomes.

40 THE COMMISSIONER: Just remind we why it is outside.

MR BEASLEY: I have no idea, but that's an assertion in the analysis.

MR O'FLAHERTY: Well, I was going to - - -

MR HARRISS: Can I just add to that.

MR HARRISS: Yes.

MR HARRISS: One of the things we mentioned earlier in the Murray-Darling Wetlands Working Group, one of their objectives has been not only to get water into wetlands to rehabilitate them, but in some of those wetlands which were permanently inundated, which were otherwise ephemeral, to actually keep water out.

MR O'FLAHERTY: Yes.

MR HARRISS: So they can construct wetlands to stop high summer flows, for example, coming in and keeping a wetland and a classic example is Lake Moira in the Barmah-Millewa Forest, where they now exclude high summer flows and you have seen a recovery of the environment because, previously, it was more like an English lake than an ephemeral lake

15

5

MR O'FLAHERTY: Well, because naturally it wouldn't get wet in summer.

MR HARRISS: That's right. Generally speaking, that's right.

20 MR O'FLAHERTY: And wetlands do need that time where there isn't floods on that end.

MR HARRISS: Filling and drying regime, you just watch – you know, Lake Eyre come back to life when water comes into it. It's – it's just part and parcel of the Australian environment.

THE COMMISSIONER: I don't think anyone has any doubt that it would be crude and wrong to put water permanently where the environment has developed by intermittent flows.

30

35

25

MR HARRISS: It has happened, and it's largely a cultural thing where Australians coming from Britain have thought, "Well, it's wetlands. It's not a wetland unless it's wet." Lakes have – you know, I can remember being very cynical when the ACT government, said, "Well, once you start to dry out Lake Burley Griffin and reinstate its natural cycle, we will be doing pretty well." That was about the – very much tongue in cheek, but there has been a conscious push to – in some areas to actually dry out and reinstate that.

THE COMMISSIONER: Yes. But I think environmentalist generally regard that as a good thing, don't they?

MR HARRISS: But again, I will use an example of the Euston Lakes, which are just upstream from Mildura. There's people who live around them, and the last thing they want to see is a dry lake bed.

45

THE COMMISSIONER: No. I said environmentalists.

MR HARRISS: Yes. The environmentalists think it needs a wetting and drying regime.

THE COMMISSIONER: Thank you. Yes. I have not seen any serious scientific resistance to that idea.

MR HARRISS: No.

THE COMMISSIONER: I'm sorry, Mr Beasley, you have thrown me.

10

MR BEASLEY: The EIS for the Menindee Lakes, I thought, from the MDBA's analysis, is more required to get a development approval for whatever needs to be constructed.

15 THE COMMISSIONER: Can you just remind me of where the MDBA has asserted

MR O'FLAHERTY: Yes.

20 MR BEASLEY: It's in tab 6 of the Menindee Lakes supply measure court folder and it's that - - -

MR O'FLAHERTY: Page 5.

MR BEASLEY: --- analysis of the business case that was produced only through the ---

THE COMMISSIONER: Which I have read, and I obviously didn't pay sufficient regard.

30

40

45

MR BEASLEY: So at page 5 of 11 it starts off talks about potential impacts on Golden Birch, 8,000 hectares in lake.

THE COMMISSIONER: I see. The Menindee Lakes falls outside of the SDLAM framework for testing environmental equivalents. That's the statement that you can't explain.

MR BEASLEY: Yes. As such, any trade off environmental outcomes associated with generating water Menindee lakes will not contribute to lower the environmental outcome scores using the ecological elements method. That's the method that's outlined in schedule 6.05 of the Basin Plan.

THE COMMISSIONER: Yes, Mr Harriss, do you know why it would be that the Menindee lakes falls outside of the SDLAM framework for testing environmental equivalents?

MR HARRISS: I would only be speculating, but my understanding of the models that I've looked at, if you undertake some works, what the impact on particular sites – and one of those might have been in the Goulburn River – so if you provide more water downstream by Menindee Lakes there is less water provided down the

5 Goulburn River, which will reduce the environmental outcomes in the Goulburn.

MR BEASLEY: My guess – and it is a guess, it's pure speculation, but I have never been able to find out if the Menindee Lakes is part of the northern Basin or the southern Basin. And SDL adjustment - - -

10

THE COMMISSIONER: Southern Basin, isn't it?

MR BEASLEY: --- relates to the southern Basin because, in relation to the northern Basin, we've had the amendment of the northern Basin reviews.

15

THE COMMISSIONER: I thought the Menindee lakes was the northern - - -

MR BEASLEY: Well, I'm not sure.

20 THE COMMISSIONER: Northernmost reach of the southern basin.

MR HARRISS: Yes, my understanding would have been it is part of the southern Basin, up to the influence of the which is downstream of Wilcannia. That would be my understanding.

25

MR BEASLEY: That might be right, but I – if you look at a map of the northern and southern Basin, it's very hard to tell where the dividing line is.

THE COMMISSIONER: I'm just remembering a description in words talks about the Lower Darling as fed by the Menindee Lakes, is included in the southern basin.

MR BEASLEY: If that's right, then I don't – then what I just said about it perhaps not being in the southern Basin is - - -

35 THE COMMISSIONER: Well, is it possible that - - -

MR HARRISS: Can I - - -

THE COMMISSIONER: Yes.

40

MR HARRISS: There was a document put out by MDBA a few years ago, which identified that the – and firstly articulates the separation between the northern Basin, saying the water recovered in the northern Basin does not typically provide outcomes, it only flows to the southern Basin time. So for the purpose of the Basin Plan the water recovered is for the environment – in the northern Basin is for

Basin Plan the water recovered is for the environment – in the northern Basin is for the environment of those tributaries and the Barwon-Darling River down to Menindee alone.

MR BEASLEY: That may be right and what I said may actually be best forgotten, because thinking it through if it's a supply measure - - -

MR HARRISS: Yes.

5

MR BEASLEY: Menindee Lakes, that sort of defines it as part of the southern Basin

MR HARRISS: I think it has always been considered as part of the southern.

10

MR BEASLEY:

MR HARRISS: Well, it's fundamental. It's a major asset for the southern Basin.

15 MR BEASLEY: Yes. So in those – well, precisely. So I don't know the answer.

THE COMMISSIONER: It may be that it's not part of the – it may be that it is, in fact, not part of the – what are called benchmark conditions of development. That can be examined.

20

MR HARRISS: I think what has been said today is that it's part of the southern Basin, but to determine what the environmental impacts are cannot be considered on the way it's currently undertaken by the MDBA through their modelling – through their model.

25

MR O'FLAHERTY: Sorry, I'm not sure I understand what that means.

MR HARRISS: I don't understand.

30 MR O'FLAHERTY: They haven't done the assessment - - -

MR HARRISS: Well, I was just made aware of that - - -

MR O'FLAHERTY: - - - of environmental equivalencies.

35

MR HARRISS: That discussion about how it's outside of the environmental equivalence assessment.

MR O'FLAHERTY: Yes.

40

MR HARRISS: So maybe it can't. The stuff that's undertaken Murray – in the Menindee lakes and in the Lower Darling cannot be assessed using the current model. But that would be a question you would have to ask the MDBA.

45 MR O'FLAHERTY: Yes.

MR BEASLEY: Mr O'Flaherty showed me a document that has just been inserted in the SDL adjustment - - -

MR O'FLAHERTY: Yes. It's in our - - -

5

MR BEASLEY: --- where it has got a heading Dealing with Why Menindee Lakes Might be Outside of the SDL Adjustment, and the text has no relevance at all to that topic. I think it's in your SDL adjustments folder. 12 something.

10 MR HARRISS: Is that the one you're talking about?

THE COMMISSIONER: No. That's 2018. I'm sorry, Mr Harriss - - -

MR HARRISS: That's fine.

15

THE COMMISSIONER: --- it may be that we need to do further work on understanding ---

MR O'FLAHERTY: I'm somewhat constrained by the fact we can't ask the MDBA these questions at the moment.

THE COMMISSIONER: Well, we can ask.

MR HARRISS: I think, from a New South Wales perspective, you could contribute a significant volume of water to meet their requirements under the Basin Plan by doing infrastructural works at Menindee which do two things.

MR O'FLAHERTY: Yes.

- MR HARRISS: That is to reduce the surface area and to make evaporative savings, which can then be used as almost like a to provide additional water. But by changing the current rules where the Menindee Lakes, the volume, the residual volume is maintained for drought reserve for New South Wales, to bring that down, you can also provide additional water. But in so doing you would impact the people along the Lower Darling. That includes Broken Hill, for which a pipeline is being an alternative water supply pipeline is being built. A major user was Tandou which I understand there has been agreement reached between the Commonwealth and Websters, who own Tandou.
- And would have to look at the water needs of permanent plantings along the Lower Darling and I will state that I work closely with the people in the Lower Darling. So you would also look at how do you provide stock and domestic flow and town water supply. But there are potentially a lot of water savings and by changing institutional arrangements to deliver a lot more water down to meet a significant component of New South Wales' requirement to deliver water for the Basin Plan. Part of that 605. My understanding was at the last Ministerial Council at the end of

2017, it was suggested they could generate up to 106 gigalitres. Which is in my mind, if it's selling at \$4,000 a megalitre that is a lot of water – a lot of money.

MR O'FLAHERTY: You make those points in paragraph 47 of your statement – that those are the three issues that needed to be addressed.

MR HARRISS: Three big issues. The other ones are smaller issues but water supply to the townships, there is – Menindee and Pooncarie. They are only very small towns and during the drought we actually provided water through Pooncarie through a cart. So – and stock and domestic requirements are far less than the volumes required to be stored to secure high security entitlements.

MR O'FLAHERTY: In that paragraph 47, you talk about when we started developing this current supply project. Do I take that to mean the supply project that's now been developed or was this historical – because I think you've have talked about the fact that Menindee Lakes have been looked at since they were - - -

MR HARRISS: It is almost a continuum. We were looking at what works we could do for the Basin Plan before – and to recover water through the Menindee Lakes, I think, before the concept of this 650 down was made.

MR O'FLAHERTY: Yes. And - - -

MR HARRISS: And in 20 years none of those – what you talked about – those main components of the project have not changed.

MR O'FLAHERTY: Yes. I just wanted to take you to an article that you wrote in 1994, this is exhibit RCE 46, which I think is in the folder attributed to Professor Kingsford.

30

10

20

THE COMMISSIONER: Yes. I have read that beforehand.

MR HARRISS: It brings back memories.

35 THE COMMISSIONER: That must take you back.

MR HARRISS: It takes me back quite some time, yes.

MR O'FLAHERTY: Yes. This reinforces the fact we have been looking at the Menindee Lakes for – at least since '94.

THE COMMISSIONER: I realise this is unfair, but see if we can get away with it. Is there anything in this – I have read this article closely. Is there anything in this that you warn me I should not give any weight to now?

45

MR HARRISS: Having not read it for 25 years?

THE COMMISSIONER: That is an unfair question then. Can you take that one notice as well?

MR HARRISS: I will take that on notice. But, certainly, I don't think much has changed. There's – well, there is some. I can provide a commentary to you.

THE COMMISSIONER: I would be obliged.

MR O'FLAHERTY: Yes.

10

MR HARRISS: But there's a couple of small things. For example the dot point on page 91 – we used to provide the Anabranch replenishment which was a stock and domestic flow of 50 gigalitres per year. We have subsequently pipelined the stock and domestic supply - - -

15

20

THE COMMISSIONER: Yes. That's right. Yes.

MR HARRISS: --- and they get, I think 3 gigalitres per year. Which is very generous because I think the – and that 47 gigalitres saving was used as a New South Wales contribution to the Living Murray.

THE COMMISSIONER: Yes. I see. Thanks. Yes.

MR HARRISS: So it would just require a bit of an update but it wouldn't be too different.

THE COMMISSIONER: If you can just – you don't need to do anything if there is nothing else you need to put to qualify. But if there is any qualification you think I should take into account when considering this, I would be obliged.

30

MR HARRISS: That's fine, if I can take this on notice.

THE COMMISSIONER: Thanks.

35 MR O'FLAHERTY: The proposed works diagram on page 90 of that article – this might be something you take on notice. But it seems to be that the common concept on this proposal is what is currently proposed is that regular at one.

MR HARRISS: Yes.

40

MR O'FLAHERTY: This – could this – this was also a proposal to – what I might call reconfigure the lakes such that Cawndilla wasn't filled that often.

MR HARRISS: That's correct. As I said earlier, the major infrastructural proposal is at one which is a – a regulated structure and has always been a regulated structure to enable water to pass from Lake Menindee to Cawndilla during periods of high flow, but to be able to return as it would have done naturally on flood recession, but

the benefit of this would be in the many small flows that come in between major floods – you could preferentially store the inflows into Lake Menindee and upstream lakes without it spilt into a significant area. If you look at the scale, you've got – it's probably – it might be 100 square kilometres and that a significant amount of water when you have two metres net evaporation.

MR O'FLAHERTY: In the discussion you talk about the need to identify – this is on the bottom of the first column on page 91 going up to the top of the second column – identify practical and environmentally acceptable means of reducing evaporation.

MR HARRISS: Yes.

MR O'FLAHERTY: That, I take, is an indication that something along the lines of what the supply measures have to demonstrate – and that – in other words environmentally equivalent outcomes – would need to be considered.

MR HARRISS: Yes. It was all subject to an environmental impact assessment where those issues are identified.

MR O'FLAHERTY: Yes. And going to the last page of that article, page 94, you talk about the environmental issues and the proposal raising a number of them.

MR HARRISS: Yes.

25

20

5

10

MR O'FLAHERTY: Do I take it that the dot points in the middle of that page is, at least, a fairly succinct summary of the sorts of inquiries that would need to be made for that environmental impact statement?

30 MR HARRISS: Yes, and I don't think they would have changed.

MR O'FLAHERTY: And I think you said that there has been at least some environmental studies done.

35 MR HARRISS: Yes, there has been a - - -

MR O'FLAHERTY: Was there an environmental impact statement or equivalent process done with respect to the proposal that's discussed in this?

40 MR HARRISS: No, no. I think it has been pointed out there has been no comprehensive EIS done for a specific proposal.

MR O'FLAHERTY: No.

MR HARRISS: There has been an enormous amount of work done through numerous investigations over many, many years.

MR O'FLAHERTY: Because it does talk about that an EIS will be prepared for the project. I take it that never eventuated.

MR HARRISS: No. I think one of the issues that has always stopped progressing and changing the operations and infrastructure at the Menindee Lakes there has been a lot of turnover. And people say, "Well, can't we get more benefit out of this? Can't we" – and, you know, you - - -

MR O'FLAHERTY: Is this turnover in the department?

10

MR HARRISS: In – and turnover in Ministers and - - -

MR O'FLAHERTY: Right.

MR HARRISS: --- and turnover in Ministerial Councils and turnover in the MDBA, MDBC and so on. Where the works that I supported many years ago in this, when it was investigated by the Darling River Water Savings Project subsequently identified if you just undertook the works you would only generate 35,000 megalitres of water savings.

20

MR O'FLAHERTY: Right.

MR HARRISS: But if you then – and that was – we, in those days, did not consider changing the institutional arrangements of the 640, 480 triggers, but if you adapted that then those savings could be significant. So it's almost a combination of water savings and SDL offsets and things like that. So that's what's being investigated most recently but, as you can see, by having a paper done in 1994, this has been around for quite some time.

- MR O'FLAHERTY: What's not part of that proposal, that is part of the current proposal, is this new pipeline to supply water to Broken Hill. In your statement you talk about in paragraph 48 you don't agree with that pipeline. I wonder if you might be able to explain the position you reach and why you reach that position?
- 35 MR HARRISS: The pipeline, financially, I think it's going to cost more than half a billion dollars, I think, is at the present stage.

MR O'FLAHERTY: I think that has been the amount that's been – something in the order of 480 or 500,000. Maybe \$500 million, yes.

40

MR HARRISS: The actual volume required by Broken Hill is not significant. They have an entitlement of about 10,000 megalitres per annum, which they use 6,000 megalitres per annum on average.

45 MR O'FLAHERTY: Right.

MR HARRISS: Okay? We believed that by undertaking – and up until 1994, just using that as a – because it's a convenient date, Broken Hill had never run out of water. So by undertaking the works which has more water, more frequent than the upstream lakes, which provides the offtake to Broken Hill, they would in fact be increasing their security of water supply even though they have never run out of water. It has only been in recent years where we have had some issues where Broken Hill's water supply has been threatened. So I maintain – and I still maintain that the works would increase the volume of water in those the upstream lakes which feed Broken Hill's water pipeline.

10

5

MR O'FLAHERTY: So this is – by upstream lakes, you're incorporating the three main upstream, or just - - -

MR HARRISS: No. Lake Wetherell - - -

15

MR O'FLAHERTY: --- Wetherell and Pamamaroo.

MR HARRISS: --- Pamamaroo. Broken Hill takes its – you could actually use Lake Menindee to a certain degree.

20

25

MR O'FLAHERTY: Yes.

MR HARRISS: Because Broken Hill takes its water from the Menindee weir pool, which is held back by weir 32 which is downstream of Menindee outlet, from memory.

MR O'FLAHERTY: Yes.

MR HARRISS: So - - -

30

MR O'FLAHERTY: I think that's

MR HARRISS: --- by undertaking these works you have increased the security of supply for Broken Hill, which had never previously run out of water. We have also improved the water treatment, and what I have alluded to in my statement, there have been known groundwater reserves. One where the Tallywalker Creek comes in from – Tallywalker Creek it is an effluent of the Darling, upstream of Wilcannia, and much of that water comes back in downstream of Menindee. Where that water has been coming in for millennia there is an enormous alluvial aquifer which could be drawn on. But I'm told, and I have alluded to in my statement, that that is actually fossil water. And so you are going to be drawing on water that has been accumulating for many, many, many millennia.

MR O'FLAHERTY: When you say it's prehistoric water, does that mean it hasn't – doesn't recharge, that it has just been there for - - -

MR HARRISS: No. It recharges very slowly.

MR O'FLAHERTY: Right.

MR HARRISS: Over a long period of time. There is another aquifer downstream of Lake Menindee and Lake Cawndilla called very remote. But I think the –

5 whatever the groundwater, the Commonwealth groundwater experts have identified that. But there is also a known aquifer on the north-west of Lake Menindee. And that is recharged, my understanding is, from Lake Menindee. So why you wouldn't need an alternative supply to Broken Hill is you could provide them surface water, when water is in those Menindee Lakes, including Lake Menindee. When Menindee Lake dries out you could actually supplement – as opposed to providing alternative supply – from the groundwater that had been recharged when the lake was full. So it's almost like self-correcting.

MR O'FLAHERTY: Yes. So the groundwater becomes the drought reserve.

15

MR HARRISS: It becomes the drought reserve. And I think the important thing you wouldn't be supplying Broken Hill an alternative supply of groundwater, it would be a supplementary supply of groundwater. And there are many places around Australia, and even more so around the world, which rely on groundwater.

MR O'FLAHERTY: Moving on from the Menindee Lakes, unless Commissioner

THE COMMISSIONER: No, that's all right. That's fine.

MR O'FLAHERTY: I wanted to ask you the – a few questions about the topic you discussed in paragraphs 54 to 60 about managing water – water taken unregulated systems. We have got – we have heard evidence about the embargo system in, I think, it's section 324 of the New South Wales Water Management Act. That is, fair to say, the embargo which is a fairly blunt instrument to protect what is – the purpose, I see it is to protect the 18 months supply of water into Broken Hill. That system doesn't seem to lend itself well to protection of what we are hearing about is low flows. Is that fair or - - -

- 35 MR HARRISS: Well, it's a blunt instrument, and the pretext was to protect the supply to Broken Hill. But in so doing it typically protects low flows when there has been an extended dry period. Otherwise Broken Hill's water supply wouldn't have been reduced to 18 months.
- 40 MR O'FLAHERTY: Yes.

20

25

45

MR HARRISS: So by putting on an embargo under section 324 you would protect Broken Hill's water supply, and in so doing you would protect those small flows that were passing down providing environmental benefits and I think that point was the protection of the low flows was very much a focus of the MDBA submission following the Ken Matthews review. Prior to that, there was also done in the early 90s a policy, which was done by the Department of Water Resources, which

recognised the needs to protect water down to Wilcannia and that was in response to the 1,000 kilometre stretch of algae bloom that occurred in the Darling River in 1991. So they were already considering what are the environmental needs all the way down.

5

MR O'FLAHERTY: Yes. Now, in a regulated system, the protection of environmental water is comparatively more simple.

MR HARRISS: Yes.

10

MR O'FLAHERTY: Because you have got releases from regulated storages and you have got entitlements - - -

MR HARRISS: Yes

15

20

25

MR O'FLAHERTY: --- which relate to those. We are hearing statements about low flows ought to be protected, but it's more difficult in an unregulated system. From your experience, how can low flows or environmental flows – you may have heard Mr Whan talking about protection of environmental flows, but so as only to protect environmental flows and not flows that can be extracted lawfully extracted. How does one differentiate that?

MR HARRISS: Well, let's take it in two parts. Setting aside what Mr Whan said, low flows in an unregulated system can typically be protected by having cease to pump.

MR O'FLAHERTY: Yes.

MR HARRISS: So if a flow reduces below a level at a particular gauge or a particular point it is possible to say, "Well, you must cease to pump under such circumstances." The difficulty – you might have a cease to flow at maybe one metre on a gauge. Now, if an environmental flow is put down and the flow – and the flow is 1.5, people have access to that water. If an environmental flow is put on - - -

35 MR O'FLAHERTY: Yes. Because it's over 1, yes.

MR HARRISS: Mr Whan was suggesting that okay, it would be fine to protect that water provided – if people had access to that between 1 and 1.5 weren't going to be restricted because there is environmental water coming down on top of that. He's saying that – and we've always said, all along when I was the Commissioner, said we will do anything to protect those flows, but we don't want to disadvantage people who would otherwise have had access to flows at that time.

MR O'FLAHERTY: Yes.

45

40

MR HARRISS: And it is a bit difficult because that would be water that people would have had access to in a – and what's the environmental water? The example I

give in a regulated system is the Barmah-Millewa Forest. They've got a lot of – it's a huge area. So you put environmental water, and it goes over a bank, and it's sitting there, and you get a 50 mil rainfall event. Some of that water would otherwise have come back into the river and been available for reregulation and be available for water users. How do you differentiate that and the water that's gone in for an environmental purpose? And what's come back and what should be tagged as green for environment and what should be tagged as red for possible consumptive use?

It's not easy and we undertook in the Darling to undertake water shepherding trials when the water was in channel. It was not difficult. You could assess how much water would otherwise have been diverted, not been diverted through environmental flows and, through arithmetic, just work it till it gets right through the system. When water is over bank, it's far more difficult.

MR O'FLAHERTY: Well, taking the instream example for a moment, am I right in thinking that one way – you talk about the cease to pump. Is it a way of essentially having those levels being variable depending on the flow regime?

MR HARRISS: That is – that is potential, but you have got to remember that flow level will be different at every 10 metres along the river.

MR O'FLAHERTY: Yes.

5

30

35

40

45

MR HARRISS: So it's not all that easy. You have to be specific for – and link someone's entitlement to a particular point in the river. And that will vary for just about every diversion point.

MR O'FLAHERTY: So that would have to be variable, and you are saying that practically it's a fairly involved exercise.

MR HARRISS: fairly involved, but it's not beyond – you know, achievable.

MR O'FLAHERTY: And I go back to that comment I made that the embargo systems is a fairly blunt instrument, but it's fairly – it is one benefit of it is a – a very certain, rigid system.

MR HARRISS: True. But it could be blunt because the outcome was to secure Broken Hill's water supply and town water supply is the highest priority for water supply under the Water Management Act in New South Wales.

MR BEASLEY: They are now legislating in individual daily extraction and talking about bringing in total daily extraction - - -

MR HARRISS: Yes. For different - - -

MR BEASLEY: zones in the which possibly may have an ability to protect environmental flow.

MR HARRISS: Yes. And I think that's one of the sort of ideas that can be considered to do that.

MR O'FLAHERTY: Yes. And that's certainly possible. And is part of that the – I think you make the point later on in your statement, part of that would be a more public register of take that would need to be required and would have more transparency between what is required of users and what users are obtaining?

MR HARRISS: Yes. I made the point, as we were developing the metering project and in consultation with the Commonwealth and other jurisdictions, we were saying we were going to install the most up to date meters. The point was – made by Mr Whan was maybe they are not necessarily compliant with the standards which we were trying to develop. There was a lot of work going into that, but we were trying to insist on having telemetry because the basin is an enormous place. You can't – having telemetry you can tell who is pumping when and where.

They have – the future that we envisage was almost having, 20 years down the track, you would have live data about who owns what water in what accounts and that could be tradable on a real time basis. And if you didn't want to have that your water available for trade then it would be tagged as such. However, it's a public resource, and I don't think anyone – if you are going to be a beneficiary of a public resource then you should be open to scrutiny.

MR O'FLAHERTY: Just on that information sharing point of view, you make a statement in paragraph 97 of your statement, some irrigators have no problems with that, some think it's an invasion of privacy.

MR HARRISS: Yes.

20

30 MR O'FLAHERTY: Have you had irrigators say to you, "I don't want that information made public?"

MR HARRISS: I don't know if you could name a specific irrigator.

35 MR O'FLAHERTY: No. I'm not asking you – I'm asking more in the general sense.

MR HARRISS: More – very much in the general sense, they say, "Well, no, no, no, that's our business, it's our – you know, commercial-in-confidence and all that sort of stuff." But I've have had other irrigators say, "No, I'm quite proud of our – my our water use, and I have no problem on a daily basis, if someone wants to see how much I have extracted."

MR O'FLAHERTY: Have they set out, other than an assertion or privacy or commercial-in-confidence, have they set out any reasoned basis for which that information shouldn't be made public?

MR HARRISS: No. I understand they are having a review within the department at the present stage, but I have not seen – I have been given an example, I was at a meeting where they suggested the new policy was going to be private ownership meters, and I said, "Well, I have never been supportive of that but that's all right."

But there was also exemptions to what has to be metered, which is a punch size less than 100 millimetres for surface water and a pump size less than 2,000 millimetres for groundwater. And I have made that – mentioned that in my statement.

MR O'FLAHERTY: Yes.

10

MR HARRISS: I think that's probably too generous. But what it also doesn't pick up is that the basic landholder rights, which are under the old British system, which we still have in New South Wales, and probably still apply in most parts of the world, are not required to be metered. And that in many years has - - -

15

25

40

MR O'FLAHERTY: This is for stock and domestic?

MR HARRISS: Stock and domestic and and stuff like that. In many years that's irrelevant but in dry years that is very significant, because particularly when you go to some properties which are very large properties, and have a very large take for domestic purposes. For stock purposes, sorry.

MR O'FLAHERTY: I say you haven't heard or been convinced by any reasoned explanation as to why water take shouldn't be looked at the subject of a public register?

MR HARRISS: No.

MR O'FLAHERTY: On the topic of meters, you talk about savings that were taken in return of upgrading meters. Paragraph 84, you talk about metering – meters it under recording by about eight per cent in favour of the farmer.

MR HARRISS: Yes.

35 MR O'FLAHERTY: Installing the correct meter that doesn't have the eight per cent error, does that translate to an eight per cent savings?

MR HARRISS: No, absolutely not. And that was one of the difficulties we had. It was almost like a notional water saving we were providing. Part of the arrangement with the Commonwealth was if they were going to invest in these state priority projects, they expected a return of water that met the requirement.

MR O'FLAHERTY: Yes.

MR HARRISS: Which was fine. The issue we had, okay, a company - an engineering company was passing a sprinkler off which identified on average there might be up to an eight per cent discrepancy. Now, if I had an entitlement of 100

megalitres a day and I only used 80 according to the meter, but I got a new meter which said I used 88, I continue to use 88. That doesn't translate as an eight megalitre saving. Okay. So where we saw the savings were was that any illegal pumping or any unmetered pumping - and the rationale was quite simple that if your pump broke down as an irrigator, you would go get it fixed immediately. If your metre broke down, you weren't in such of a hurry. So there would be that kind of unrecorded usage that - the total of which we could sort of state with hand on heart that would be a legitimate water saving that's not going to impact on the users.

- MR HARRISS: It wouldn't necessarily have to be on a case by case basis, though, wouldn't it? The fact that unrecorded you don't know they are taking more than what they are entitled to, of course. They could be taking less.
- MR HARRISS: No. That's exactly right. So you have to make some sort of assumptions. If your metre was only recording by eight per cent you had a 100 megalitre entitlement, you were typically using 98, then, yes, you would it would come back. But that would be a small component of the people that would be impacted.
- MR O'FLAHERTY: Did that level of analysis was that level of analysis under taken?
- MR HARRISS: No, not at the individual level, and that was one of the arguments the irrigators had was that you would have to do all of this on an individual basis before we could be convinced that you're going to generate those water savings, and that was that would be an enormous job.
 - MR O'FLAHERTY: When you say the Commonwealth this is in paragraph 86, the Commonwealth funded land owners to upgrade metres and in return.
 - MR HARRISS: That was some parts of different on ground projects that they did
 - MR O'FLAHERTY: Sure.

5

30

35

- MR HARRISS: --- where they invested in efficiency supplies they said by the way you need a new meter and we said we will take some of the savings back.
- MR O'FLAHERTY: I note the time, Commissioner. I have got just some questions about constraints. I won't be very long, but we might wish for a lunch break.
 - THE COMMISSIONER: How long do you think?
- MR O'FLAHERTY: I hesitate to estimate five or 10 minutes, but that's going to be my estimate, I think.
 - THE COMMISSIONER: Are you happy to continue?

MR HARRISS: My flight leaves at quarter to 5, Commissioner. So I'm happy to continue as long as you're - - -

MR O'FLAHERTY: I probably won't be all that very long. I just wanted to ask some sort of follow up questions about constraints.

THE COMMISSIONER: Focus them.

MR O'FLAHERTY: I will be very focused. You talk about constraints. This is on paragraph 68 - from paragraph 68. And we talked about previously the fact that that was one of the New South Wales primary concerns: constraints needed to be addressed in order for the Basin Plan to be properly implemented.

MR HARRISS: Yes.

15

MR O'FLAHERTY: Paragraph 75, you talk about my understanding is that not much has progressed with addressing constraints.

MR HARRISS: I'm unaware of the progress. I haven't been involved with the last four years.

MR O'FLAHERTY: Yes. So that's from your awareness.

MR HARRISS: Yes, that's right.

25

MR O'FLAHERTY: As at 2014 when you finished with the department, I take it that that progress hasn't gone very far.

MR HARRISS: No. It was just commencing.

30

MR O'FLAHERTY: You talk about two scenarios in paragraphs 77 and 78. One is, I take it, in 77 is a - essentially a pipeline on the New South Wales side of the Murray.

35 MR HARRISS: It's not a pipeline. Murray Irrigation.

MR O'FLAHERTY: A canal.

MR HARRISS: A canal is a very large diversion structure which can take up to 10,000 megalitres a day out of the Murray River out of Lake Mulwala, but it's telescopic. As it progresses, it gets progressively smaller.

MR O'FLAHERTY: Progressively thinner. Yes.

45 MR HARRISS: Yes. Thinner. So – but that takes water above the choke and can release water back into the Murray River or into the Edward Wacol system which is a part of the Murray River downstream of the Barmah Choke.

MR O'FLAHERTY: You said that's a canal. Is that operated by Murray Irrigation?

MR HARRISS: Yes.

MR O'FLAHERTY: That's one of the privatised entities that operates those irrigation districts. This, what I might call, proposal - is that something you understand to be an official proposal, or is that an idea that you had?

MR HARRISS: It's not an official proposal, but it's been around for quite some time. I understand that Murray Irrigation are quite comfortable in allowing their infrastructure to be used to divert water through their infrastructure to wetlands or to the environment downstream provided it doesn't impact on their capacity to supply users at the that's usually – they don't usually coincide. The purity effect demand in Murray Irrigations has typically been January/February, whereas, the environment - the high flows in the Murray River is typically in September/October. So, you know, there's potential to use it for - - -

MR O'FLAHERTY: Dovetailing of use.

20 MR HARRISS: Yes, that's right.

MR O'FLAHERTY: You said it was an idea, was it being kicked around in the department whilst you were there, was it?

25 MR HARRISS: Yes, that's right.

MR O'FLAHERTY: Do you know if anything, any scoping studies or any reports

- MR HARRISS: I don't think there was any done by the department. There may well have been investigations undertaken by Murray Irrigation themselves. There was also at that stage consideration been given to putting a small energy, hydro plant on those canals to, you know, make the best use of the flows to - -
- 35 MR O'FLAHERTY: The flowing water. And then there is the other one which is on the Victorian side and what's called Bunna Walsh canal. Is that a similar scenario, was it?
- MR HARRISS: It was to be my understanding was it was going to be a new bit of infrastructure. That has been talked about for 40 years. I might have told that Bunna Walsh was actually a Senator many years ago in Victoria.

MR O'FLAHERTY: That's actually, a proposal, concrete or otherwise - - -

45 MR HARRISS: Yes.

MR O'FLAHERTY: --- that's been - I think you talked about being around for 40 years, but there is no progress at least on that.

- MR HARRISS: Not that I'm aware of. No. I think when it was being discussed all those things were being discussed when it was only being used for consumptive purposes, then New South Wales during my time was saying, "Well, that would be all right provided you measure how much water goes out. And then how much water comes back in downstream, and that would be debited against Victoria's accounts".
- MR O'FLAHERTY: That's the conclusion of my directed questions. Was there anything that we haven't covered this morning or this afternoon that you had wanted to cover or do you have any other comments?
- MR HARRISS: No, no, we I think we have covered it, and I think my written statement sort of covers very generally the sort of issues that I was asked about. So

THE COMMISSIONER: Thank you very much. . I appreciate it. Thank you.

20 MR BEASLEY: Will we resume at 2?

THE COMMISSIONER: No. We will resume at 2 o'clock.

MR BEASLEY: Thanks.

25

<THE WITNESS WITHDREW

[1.09 pm]

30 ADJOURNED

[1.09 pm]

RESUMED [1.59 pm]

35

40

- MR BEASLEY: Commissioner, I have invited Mr Woods, who is the Chair of MLDRIN, and Mr Mooney, who is the Executive Officer of MLDRIN, just to take their seats. Just before they give evidence though, it may assist them they were not here yesterday when prior to Mr Hooper and Ms Morgan giving evidence, and just so they know that I'm not going to run through it again, but just so they understand that yesterday, prior to Mr Hooper from NBAN and Ms Morgan from Yorta Yorta giving evidence, I ran through the relevant provisions concerning Aboriginal people in both the Water Act and the Basin Plan so they are familiar to the Commissioner.
- We also took some time going through the new publications of cultural flow that were published at the end of June. So that's more material that's already before the

Commission as a means of introducing the matters in which we wish to discuss today. So the witnesses can now be sworn, please.

5 < RENE PAUL WOODS, AFFIRMED

[2.01 pm]

<WILLIAM MOONEY, AFFIRMED

[2.01 pm]

10

MR BEASLEY: Mr Woods, can you give the Commissioner your work address?

MR WOODS: 9 Castleton Street, Wodonga, Victoria.

15 MR BEASLEY: And you are the Chair of the Board of MLDRIN?

MR WOODS: Yes.

MR BEASLEY: Lower Darling Rivers Indigenous Nation?

20

MR WOODS: Yes.

MR BEASLEY: And you have been in that position since November 2016?

25 MR WOODS: Yes, that's right.

MR BEASLEY: Prior to that, though, you were a Director for about five years?

MR WOODS: Yes.

30

MR BEASLEY: Prior to that you were employed by the Narri Narri Tribal Council?

MR WOODS: Yes.

35 MR BEASLEY: As an operations manager for a period - - -

MR WOODS: Yes.

MR BEASLEY: --- of time and as Deputy Chairman for 17 years.

40

MR WOODS: Yes, that's correct.

MR BEASLEY: And you're also a Field Officer on the Toogimbie – is that – have I

said that right?

45

MR WOODS: Former Field Officer at Toogimbie.

MR BEASLEY: Indigenous protected area near Hay.

MR WOODS: Yes. Yes.

5 MR BEASLEY: All right. Thank you. Just before I ask you to tell the Commissioner some background about MLDRIN, Mr Mooney, you are the Executive Officer of MLDRIN?

MR MOONEY: That's right.

10

MR BEASLEY: And you have been since March 2015?

MR MOONEY: Yes, that's correct.

MR BEASLEY: Before that you were a Tutor at RMIT University for about five years?

MR MOONEY: Yes. Yes.

20 MR BEASLEY: That related to part of your tertiary qualifications?

MR MOONEY: Yes it was in -I was tutoring in social science subjects. So - yes, my tertiary qualifications were in history - environmental history.

MR BEASLEY: Yes. Bachelor of Arts in Environmental History from the University of Tasmania.

MR MOONEY: That's right.

MR BEASLEY: And you are also a Community Campaigner for the Barmah-Millewa Collective Friends of the Earth for about two years and six months?

MR MOONEY: That is right, yes.

- 35 MR BEASLEY: Thank you. Would either of you like to explain to the Commissioner I know MLDRIN was formed in 1998. What are its the reason for its foundation and what are its aims and objects?
- MR WOODS: So MLDRIN was formed after the Yorta Yorta Nations native title claim dismissed to bring together the voices of the First Nations at Murray River and surrounding tributaries. 1998, on the banks of the Murray, where the meeting took place, was decided that a collective voice moving forward would be beneficial to the First Nations' aspirations around water and land entitlements. That grew in 2009 until to 22, 23 First Nations, sorry, and subsequently now we are at 25 First Nation
- 45 groups across the southern Murray-Darling Basin area. MLDRIN itself is advocates and facilitating discussion between State Governments and First Nations groups on the ground within the southern Basin.

We are set up with a membership, a Member Nations with the board of nine executives – to add – to facilitate the discussion, around water rights and that, to the First Nations groups, and their aspirations towards cultural flows and water entitlements and better participation within the water management sector of the

- Basin. Hoping to build tools and a suite of a suite of tools that First Nation groups can utilise, to quantify their water entitlement needs and improve their environmental and cultural values within their Nation groups and their cultural responsibility to the lands and waters that we have been passed on through our elders over the years.
- 10 MR BEASLEY: And is would I be right, is NBAN a sister organisation to MLDRIN but in relation to the northern Basin?

MR WOODS: Yes. NBAN is the sister organisation in the northern Basin that does a similar role for their First Nation groups in the northern part of Basin.

MR BEASLEY: All right. Thank you. Just before - - -

MR MOONEY: I can – if I could add to that.

20 MR BEASLEY: Yes, you can.

15

40

MR MOONEY: In terms of the objections, our constitution – MLDRIN is a not-for-profit Aboriginal owned company registered with ASIC and our constitution does spell out some of the objectives. The primary objectives are around managing an environmental and a cultural fund for the benefit of the Nations as well as a number of ancillary objectives relating to confederating the Nations and creating a united voice for traditional owners, particularly in relation to water management.

MR BEASLEY: All right. Thank you. Could the witnesses be given a copy of the MLDRIN brief so that they know what I'm referring to? Commissioner, I take it you have a copy of the MLDRIN brief and also the core documents brief?

THE COMMISSIONER: I have, yes. Yes, I do.

35 MR BEASLEY: Thank you. Before I go to the detail of these, I just want to identify them first. You – MLDRIN provided a submission to the Commission dated 7 June 2018.

MR WOODS: Yes, that's correct.

MR BEASLEY: And that is an - I'm not criticising, I think it's an unsigned document. It may have come with a covering letter but who are the authors of the submission?

45 MR WOODS: Mr Will Mooney and Bruce Lindsay on behalf of the Board.

MR BEASLEY: Right. All right. And was that a collaborative effort or did you take any particular responsibility for parts of it or was it a real joint effort?

MR MOONEY: Yes. So myself – at the direction of the Board, I coordinated the preparation of that submission. We have a long-standing working relationship with Bruce – Bruce Lindsay from the Environmental Justice Australia and he's assisted us in the preparation of that submission as well. It was certainly collaborative with review and input from the MLDRIN Board as well.

MR BEASLEY: Mr Lindsay may have attended some informal meetings with Commission staff.

MR WOODS: That's correct. That's correct.

15 MR BEASLEY: Is he a lawyer by - - -

MR MOONEY: Yes.

MR BEASLEY: Yes. But, Mr Woods, you're familiar with the submission and able to talk to any aspect of it.

MR WOODS: Yes, mostly.

MR BEASLEY: I will tender that submission dated 7 June 2018. Murray Lower
Darling Rivers Indigenous Nation submission to the Murray-Darling Basin Royal
Commission. You have provided the Commission with a supplementary submission.

MR WOODS: Yes.

MR BEASLEY: I think that was at – may have been at my invitation in relation to suggested amendments to both the Water Act and the Basin Plan. I think that document is behind tab 2. I will ask some questions about that but I will also tender Murray Lower Darling Rivers Indigenous Nations supplementary submission to the Royal Commission to the Murray-Darling Basin. Can I just ask, who was the

35 principal author of this submission? Or authors?

MR MOONEY: Again it was myself and Mr Bruce Lindsay.

MR BEASLEY: All right. You've also supplied us, behind tab 3 – I assume that these are documents you've supplied to the Royal Commission, but behind tab 3 is a letter signed by you, Mr Woods, 24 February 2017 containing a submission to – it's a letter to Mr Neil Andrew, the Chair of the MDBA, containing MLDRIN's submission concerning the Northern Basin Review.

45 MR WOODS: Yes, that's correct.

MR BEASLEY: All right. I will tender that letter and that submission. Behind tab 4, you have also supplied us with a copy of a submission sent to the – by MLDRIN sent to the MDBA. Again, I'm not sure it's dated, but that is the submission that MLDRIN made in relation to the recent SDL adjustment.

5

MR WOODS: Yes, that's correct.

MR BEASLEY: All right. I tender the document behind tab 4, MLDRIN submission regarding the Sustainable Diversion Limit Adjustment Mechanism Draft Determination addressed to the Murray Darling Basin Authority at its address in Canberra. I will tender some other documents but for the present purposes that will do for the time being. I want to start with your supplementary submission. There may be aspects of your primary or first submission that I don't ask you questions about. Please don't think that's because they are being ignored.

15

20

10

All of them are being considered, but unless the Commissioner wants to -I note, for example, you are in general agreement with the Commissioner concerning some of the matters he has raised as concerns in Issues Paper 2. I don't intend to go through the process of discussing your statutory construction. The Commissioner can, of course, but that might be unlikely, well -I would have thought. So if I miss parts of your submission, please don't feel as though they are being ignored, it's just they are sufficiently clear I don't feel I need any further clarification.

In relation to your supplementary submission, where you have proposed some
amendments to the Water Act and the Basin Plan, you have – of particular note, you
have suggested there may be some inconsistency with the legislative provisions in
relation to Australia's international obligations under both the Ramsar Convention
and Biodiversity Convention. And then in particular you – turning to what you
suggest should be added to the Water Act to begin with, under paragraph 7, you
make reference to the two statutory facts in section 21(2) of the Water Act which are,
of course – these are my words but the statutory fact that there's been over-allocation
causing harm to the environment and the ecology of the Basin Plan, and the statutory
fact that special measures are needed to address that problem.

This is a suggestion that there be a similar kind of addition to section 21(2)(a) in relation to the matters raised in 7(a) to (c) concerning special measures to deal with the concerns and desires of First Nations peoples in relation to the management of the water resources; correct?

40 MR WOODS: Yes.

MR MOONEY: Yes.

MR BEASLEY: And when we get to the specifics in – more specifics in relation to that you, I think, make the point in paragraph 10 – I think this flows from paragraphs 27 to 45 of your initial submission where you start to address the issue that the Water Act in its present form and the Basin Plan, in terms of consideration of Indigenous

issues or Indigenous values to use the words of the Act, requires only having regard to rather than any more deeper form of consultation, and the deep form of consultation that you are referring to in paragraph 10 of the supplementary submission is set out in more detail I think in paragraphs 27 to 45 of the first submission.

And in particular, I'm right that you get into the – you raise the Canadian approach to First Nations, discussed in paragraph 41(d) consultation requires consultation to be conducted with a view to dialogue and accommodation, and you go on to expand about that. That, I take it, is all – I'm right, am I, that's all in response to the means by which the Basin Authority have said that the standard they have to reach for legality in relation to having regard to in the document that they have produced called Basin Plan or resource plan requirements position statement 1B, where having regard to in relation to part 1052 to 1054 of the Basin Plan requires a requirement to have regard to a particular matter, but with no additional requirements; correct?

MR WOODS: Yes, that's correct.

5

10

15

MR BEASLEY: And that's an unsatisfactory position in terms of the way MLDRIN sees Indigenous values and Indigenous views on their – on the means by which cultural economic and spiritual matters in relation to the water resources should be – those views should be considered in relation to how the Basin Plan (a) is put together – was put together, but (b) is currently implemented.

25 MR WOODS: Yes, that's correct.

MR BEASLEY: Is there anything – you can certainly add to the description I've just given.

- MR MOONEY: Yes. So I think in MLDRIN's experience, in dealing with throughout the development and implementation of the Basin Plan, we have recognised at various points that the provisions in the Plan are 'having regard to' are insufficient to establish a requirement on the State Government's preparing those Plans to undertake what we would consider to be sufficient consultation. The model of the Canadian approach to consultation, what we understand it is embedded in a Canadian system, and precedence in that country provides an effective model of a comparison. The the provision of 'have regard to' establishes what we see as a discretionary arrangement. So states are essentially the - -
- 40 MR BEASLEY: They are bound to have regard to something, but they don't have to do anything beyond that.

MR MOONEY: They are bound to have regard to, but they don't have to - - -

45 MR WOODS: They don't have to do anything.

MR MOONEY: They don't – they don't need to act. They don't need to give effect to, or implement the kinds of input or the aspirations or rights and interests as expressed by the Aboriginal people they are consulting with. And that – I guess the key point sort of arising from our submissions is that that is not in alignment with the spirit of the international obligations that the Basin Plan, the Water Act, is meant to give effect to or implement.

MR BEASLEY: Yes

10 THE COMMISSIONER: The obligations – I shouldn't say the obligations – the values you've just referred to, developed internationally, do they culminate in particular with the free, prior and informed consent notion?

MR MOONEY: My understanding is that the Canadian approach to deep consultation is nearly analogous to a process of free, prior and informed consent. Indigenous people don't – aren't afforded a right of veto under that approach, which the consent of free prior informed consent would – should entail some sort of right of veto over actions or projects that are considered to be negative or have a negative impact.

20

5

THE COMMISSIONER: So there's no veto?

MR MOONEY: There's no – it's basically – from my understanding it's anything up to a right of veto. So there is a process of negotiation, and in this Canadian deep consultation approach there is consultation with a view towards agreement, and a view towards a negotiation or a bargaining type approach, rather than a – simply a – an obligation to collect information about these values as they have regard to terminology.

- MR BEASLEY: I'm just wondering sorry, I'm just wondering if I can help the dialogue you are having with the Commissioner. If you turn to tab 12 of that briefing bundle, and flick over a couple of pages you will find the I'm going to pronounce this incorrectly. Is there a tab 12?
- 35 MR MOONEY: Yes.

MR BEASLEY: So what's the first page you have got there? Is that d

MR MOONEY: Chapter, water resource plan guidelines.

40

MR BEASLEY: I'm just wondering whether you've got the right – what folder – tab – that's the right one. So - - -

THE COMMISSIONER: It's page 5 of the Akwe: Kon guidelines.

45

MR BEASLEY: That's what I was going to take you to.

MR MOONEY: Yes.

MR O'FLAHERTY: If you look at the – I've been told to pronounce it Akwe: Kon, but who knows.

5

THE COMMISSIONER: I'm sure you are right.

MR BEASLEY: But that sets out – the matters set out there, if you have a look at them, are in fact what NBAN's submission – I'm just still not confident you are on the right page.

THE COMMISSIONER: 27 November 2015.

MR WOODS: I think we are familiar with the - - -

15

35

MR BEASLEY: I would rather you saw them. So MLDRIN brief.

MR WOODS: Yes.

20 MR O'FLAHERTY: You've got them now?

MR WOODS: Yes.

MR BEASLEY: Great. They are, just for the purposes of your discussion you are about to have with the Commissioner and just so you know, and you might need to be given a copy of the Basin Plan as well to assist. And in particular 1053 of the Basin Plan. What is set out there from the Akwe: Kon guidelines was the submission by NBAN as a replacement for 1053 of the Basin Plan. And I'm wondering whether they are the sorts of things that you're talking about in terms of a deeper form of – consultation may not even be the right word. A deeper form of engagement and a process driven approach. Anyway, I interrupted your question, Commissioner.

THE COMMISSIONER: Not at all. I was going to ask: do you have in mind any comparison between this and the so called right to negotiate in the Native Title Act.

MR MOONEY: I couldn't - - -

MR WOODS: I wouldn't be qualified to answer that.

40 MR MOONEY: No.

MR WOODS: Sorry.

THE COMMISSIONER: No, it was just an inquiry. So that at one extreme – I hope not in practice – somebody might say that they have regard to something by sitting down and saying, "Well, you tell me what you want to tell me and I'll listen." In practice it would be, I think, difficult to see that as satisfying the usual legal

understanding of what it means to have regard to, because there are qualities of genuine engagement consideration of the material necessarily to have regard to something. And then at the other extreme, if you like, there's what you call a veto, and a veto is not the law in this country. Could you just have another go – I do appreciate what you have written in various places – could you have another go at explaining to me what it is that is neither the first unsatisfactory extreme nor the second unrealistic one, what it is that you think should be made by way of improvement to the present provisions for consultation?

MR WOODS: Yes. We are – we are hoping that through consultation with the water resource plans there is plenty of time and adequate time to do engagement, build the relationships with First Nations people, have a deeper discussion around what does the states – they are required to to do under the development of the water resource plans, and water management in general. Building those relationships, taking the time to build that trust and willingness to engage from both parties.
 We've seen, where states have built relationships with First Nations groups through engagement that the outcomes and some of the objectives written into draft Water Resource Plans are quite good and they are – they have taken the time to listen to First Nations people.

20

25

30

35

40

5

That has not just come in, engage on an hour or two, sit down and then take off again to the next First Nations group. MLDRIN would like to see long a lot of consultation, giving First Nations groups plenty of time to read through documents and understand what their objectives are and where the water objectives are heading within the water resource plans. There's also the timing. So states don't just rock up on the doorsteps of First Nations groups and say, "We want to sit down with you and listen to your objectives." There needs to be lead-up time to make sure that First Nations groups have the adequate time to sit down and process that data, that they are – the states are coming to – to ask them. So that's an informed decision at the end of the day. The rushed timings, left to do the water resource plans is not adequate enough.

THE COMMISSIONER: I was going to say, assuming that they've all got to be accredited by the middle of next year, from what you have just said you would regard it as appropriate for there already to be detailed engagement with the people you represent.

MR WOODS: Yes. We have been consistent since the start of the implementation of the Basin Plan: we want to see deeper engagement. Not just have regard. We wanted – we wanted to see relationships being built with water managers and the states' agencies in writing these water resource plans. It hasn't happened in some states and now, with the condensed time frame, we feel that the actual objectives and the objectives put forward by First Nations people will be rushed over the next 12 months.

45

THE COMMISSIONER: How many water resource plans affect people who you represent?

MR WOODS: There's three in Victoria.

MR MOONEY: Three – two in Victoria now.

5 MR WOODS:

MR MOONEY: Three in South Australia.

MR WOODS: Yes.

10

MR MOONEY: And then half of -22 in New South Wales, including ground water and surface. So that will be probably be – the southern half of those – of that New South Wales area.

15 THE COMMISSIONER: So quite a few.

MR MOONEY: Quite a few.

THE COMMISSIONER: Have you had engagement with people responsible for making the water resource plans?

MR WOODS: Yes.

MR MOONEY: Extensive engagement.

25

THE COMMISSIONER: In all of those cases?

MR WOODS: Yes.

30 MR MOONEY: In varying degrees of detail.

THE COMMISSIONER: And would you regard the engagement as being completed in any of those cases?

35 MR WOODS: In some states it has been pretty good engagement.

MR MOONEY: According to the process. So one – we have – MLDRIN has reviewed for the purposes of an assessment in relation to the note listed in chapter 10 part 14 of the Basin Plan, we have formally reviewed and provided to the Murray

- Darling Basin Authority on one water resource plan. We have formally received one other plan for assessment, but the others are all in ongoing state of development at this stage.
- THE COMMISSIONER: So how far along the track are you in presenting your views as to the objectives of Indigenous people and the outcomes desired by Indigenous people within the meaning of 1052(1)?

MR MOONEY: MLDRIN itself present presenting those views? Yes.

THE COMMISSIONER: Have you completed your presentation of those or is it still in evolution.

5

MR MOONEY: If I can jump in, I think - - -

MR WOODS: We don't actually put those objectives forward. That's where the engagement with the First Nation groups individually. We are hoping that happens at the – between the state agencies and the First Nation groups there. MLDRIN itself will not put forward any objectives on behalf of the Nations. That's not our role. We are there to make sure the engagement is being done properly and giving feedback there in that space to the state agencies.

15 THE COMMISSIONER: Are there any resource plan areas where there is more than one Indigenous - - -

MR MOONEY: All water resource plans - - -

20 MR WOODS: have multiple First Nation groups within those water resource plan

THE COMMISSIONER: So they may have different objectives and desires.

25 MR MOONEY: Yes.

MR WOODS: Yes. There may be - - -

THE COMMISSIONER: How is that being handled at the moment?

30

MR WOODS: The water resource plan we did look over and assess, there was clear set out through the document what each objective was for each individual First Nation that was easy. Easily set out the engagement was done there through that process, and individually there was some themes come through the document, but each individual Nation group had their own objectives for their lands and borders, under their individual Nations. And that come through in that document. So that's what we are hoping that each state individually within the water resource plans sets out those Nation groups' objectives clearly, so then once implementation starts the states can act on those objectives.

40

45

35

MR MOONEY: If I can just add to Rene's point, different states have had different approaches to that in the – in the form – in the text of the water resource plans. So what – where some would probably have a more generalistic approach and include attempt to amalgamate the objectives of different Nations into one list of objectives, others would specify the individual objectives as – of each different Nation as they – as they have been engaged through the water resource plan.

THE COMMISSIONER: There are two phrases in 1053 as it stands that I want to ask you about. One is the inclusion of Indigenous representation in the preparation and implementation of the plan. The other is the encouragement of active and informed participation of Indigenous people. I'm not quite sure in what, but I presume either in making or in observing the plan. But I want to draw to attention that each of those phrases appears in a list of matters that must be had regard to so far as the views of relevant Indigenous organisations are concerned in preparing a water resource plan. It reads rather oddly: the plan must be prepared having regard to the views of, say, MLDRIN with respect to the inclusion of Indigenous representation and the preparation implementation of the plan.

MR MOONEY: Yes.

THE COMMISSIONER: Both of them would read rather as if there should be Indigenous representation in the preparation and implementation of the plan and there should be active and informed participation of Indigenous people, but it is not actually what it says.

MR MOONEY: It's very convoluted.

20

THE COMMISSIONER: In practice – how is it being observed in practice?

MR MOONEY: As in how have we reviewed these sections?

- 25 THE COMMISSIONER: And how have the people with whom you the First Nations are dealing with respect to the water resource plans, have they proceeded on the basis that they will listen to your views about inclusion of representation, but they won't let you be represented or not? How is it working?
- 30 MR MOONEY: Yes.

MR WOODS: Yes. Some states have increased their participation for First Nations people across the water sector. Others have cut that right back. But there is an interest now, again, to increase the participation of First Nation groups in the water sector but, that's not enough – as soon as any discussion around water, the First Nation people should be sitting at the table if it's to deal with their land and water of their particular Nation group area.

THE COMMISSIONER: Is that happening?

40

MR WOODS: Until probably the last 12 months we were the afterthought, but there is a change now within some of the other states that are slowly getting the – pick up the chain a little bit and move forward.

45 THE COMMISSIONER: What do you mean by other states?

MR WOODS: Well, there's – Victoria have increased participation of First Nations groups and participation within water, New South Wales were leading the Aboriginal water sector in regards to engagement, the Aboriginal Water Unit. That was wound back, they are resetting at the moment. There are some Stakeholder Advisory Panels where First Nation group have representation, but not across all, and that active participation within those groups, even the Environmental Water Advisory Groups, yes, there is a seat at the table, but how much influence or actually understanding does that First Nation person have sitting at that table making those informed decisions, which is just totally against that free, prior and informed consent that First Nations people work off.

THE COMMISSIONER: Thank you.

MR MOONEY: If I can – I think in addressing your question specifically, there is probably two forms of engagement that certainly MLDRIN would have in that process. One is to provide input and advice to the states on how they should undertake their consultations. So I think, you know, I think in assessing the plan we came – we came, working through section – you know, working through 10.53, we also found the – I guess the phrasing there quite convoluted in attempting to unravel how we would undertake an assessment of that, and again I guess it points to the fact that the language could be much stronger in requiring states to support that active and informed participation rather than just seek the views of organisations about whether they think it should be done that way.

25 THE COMMISSIONER: Yes. No, that's what I'm asking.

MR MOONEY: I think – so we certainly – you know, MLDRIN – MLDRIN's role in that process is to – you know, support and encourage the states to – the states who are preparing the plans to do the best in terms of the consultation - - -

THE COMMISSIONER: And you have done that in some specific detail.

MR MOONEY: We have sought to do that in all cases and with, you know, varying degrees of success depending on the willingness of those states to follow our advice, I suppose.

MR BEASLEY: But you are looking to it a Basin Plan that would require that there be actual participation by Indigenous Nations, not that your views about whether you should have participation is had regard to.

MR MOONEY: That's right.

MR WOODS: Correct.

30

35

40

45 MR BEASLEY: And I'm probably right in saying – and I'm picking up some of the things you've said when I directed you to the guidelines from the 2004 Secretary of the Convention for Biological Diversity where it is talking about – I read it as:

Reasonable or proper notification for public consultation, identification of relevant stakeholder, establishment of effective mechanisms for Indigenous participation, establishment of an agreed process for recording views –

5 etcetera, etcetera. They are a far better example of the sort of more concrete participation guidelines you want than what's currently set out in the Basin Plan regarding having regard to whether you should be involved in the process or not.

MR WOODS: Yes. That's right.

10

15

30

MR MOONEY: And I think the key point being there, point E, establishment of a process whereby local and Indigenous communities may have the option to accept or oppose a proposed development. I think these guidelines have been developed in the context of environmental impact assessments and projects or development projects, if you like, as opposed to a stakeholder - - -

MR BEASLEY: Where stakeholders can say, "I object." But – okay thanks, but yes.

- MR MOONEY: We see this as certainly transferrable, you know, the development of a plan is, you know, entails impacts in itself. So that's probably the key point there.
- MR BEASLEY: All right. If I can turn back to the document behind tab 2, where you have the heading Water Resources Need To Support Native Title. What are you intending to recommend to the Commissioner there, that insofar as:

The Water Act should be amended to require Basin states or other relevant authorities to manage Basin water resources in such a manner as to give effect to, further enable benefits, interests and rights recognised under native title or achievable under a native title claim.

What is the Commissioner to take from that?

MR MOONEY: So to provide an example, we will probably use this example a number of times, the Barkindji People on the Baaka River, or the Darling.

MR BEASLEY: Yes. The Darling, yes.

40 MR MOONEY: --- have a native title settlement over that – over the – the riparian area of the waterway.

MR BEASLEY: But not of the water itself. Yes.

45 MR MOONEY: Not of the water itself. And they have, obviously the right to enjoy their native title rights, which include customary practices including fishing, etcetera. The point being there that if they have no means to influence the way that the water

resource itself is managed in that native title area, their ability to enjoy their native title rights is compromised. Given that native – the native title – again, I – you know, not being probably qualified to comment on this explicitly, and we would certainly be willing to follow this up in more detail, but the native title not affording that kind of control over – over water per se, that the – that the Water Act would need to be amended in such a way as to allow some – to allow that influence and allow that control to support those native title rights.

MR BEASLEY: The content of that flows down to paragraph 12, doesn't it, when you're talking about a cultural flow? That – I read that – and I will come to it in more detail, but would I be right where you are saying that water resource plans have got to include a program to be implemented over the life of the plan that designs and delivers cultural flow? You are talking about something that would be analogous to incorporating, in a water resource plan, real water - - -

15

5

MR MOONEY: Yes.

MR BEASLEY: --- that is delivered possibly as a long term yearly average as a cultural flow.

20

MR MOONEY: That is learn a mechanism to achieve that outcome. There would be other ways through - - -

MR BEASLEY: And with that – I will come to the documents in a moment, that volume of water determined in a scientific way – that are explained in the recent publications; correct?

MR MOONEY: Yes.

30 MR WOODS: Correct.

MR BEASLEY: I think, before I go to those documents though, behind tab 9 you will find a MLDRIN public cultural flows and Aboriginal environmental outcomes. Again, I can't see a date on this document. Can anyone assist with when it was - - -

35

MR MOONEY: It would have been produced in mid-2015, I believe, that one. It was a briefing for general circulation.

MR BEASLEY: So in this document, in any event, MLDRIN briefing paper, cultural flows and Aboriginal environmental outcomes, I will tender that. It is behind tab 9 of the MLDRIN brief. First of all, you pick up the definition cultural flow from the Echuca declaration, but that's also picked up in the language of paragraph 31, schedule 1, of the Basin Plan; correct?

45 MR MOONEY: Yes.

MR BEASLEY: Yes. And then in 1.2 you start to discuss the differences between cultural flows and environmental flows. And on page 2 of the document you have made the bullet points concerning cultural flows are owned by First Nations. That they go beyond – the second bullet point, the way I read that is that they go beyond an environmental watering flow because cultural flows include matters that are as diverse as spiritual considerations, and to economic considerations. Is that right?

MR MOONEY: That's right.

MR BEASLEY: Yes. And modern scientific water management approaches do not always align with understandings developed through Indigenous ecological knowledge. I take from that that at least part of the science that should be used – and don't let me put words in your mouth, if I get this wrong please tell me – but part of the science that should be used in determining the extent of a cultural flow in any water resource plan area should be long term historical Aboriginal knowledge, passed down through the knowledge of how the river operates, how the ecology responds, all of those sorts of things. Is that right?

MR WOODS: Yes.

20

25

35

5

MR BEASLEY: And if it's more broad, please tell me if it's more broad.

MR WOODS: It certainly captures most of it. The – that traditional ecological knowledge, we've had – we've managed river waterways for 60,000 years plus; that has not been captured under the current water management. So - - -

MR BEASLEY: And sorry to interrupt, I imagine that knowledge not only includes knowledge about flows and floods and how the ecology responds at times like that, and also at times of less water or even drought, but it also would incorporate a knowledge of – the period through which areas of the river have declined in recent times through the – through – due to consumptive use.

MR WOODS: Definitely. Definitely right. Even some of the work I've done with the Aboriginal waterways assessment tool, just the clear difference between having an elder talk about the landscape that they visit versus someone in their mid twenties, and listen to the elder talk about how it was when he was – he or she was younger and living there on the riverbank.

That impact alone just captured there within that tool during the project is clear – clear enough evidence to say this was – this area was completely different under previous water management, where there was just water in the river being able to flow down the system. The cultural values in the landscape were thriving, where today when they revisited there was nothing there or there was a – it minimised what actual cultural values was in that landscape which meant it's impacting on their cultural values for the First Nation group of that area.

MR BEASLEY: Yes. And - - -

MR MOONEY: If I can add - - -

MR BEASLEY: Yes, go ahead, please.

- MR MOONEY: I think, to go to your question, what sort of science should be used to calculate the water allocation arrangements for different waterways or catchments, absolutely it's including traditional ecological knowledge of Aboriginal people who live in that area and who are understanding that waterway but it's also the cultural flows, sort of, methodology provides a mechanism to document the water
- 10 requirements of contemporary Aboriginal communities based on - -

MR BEASLEY: Hydrology.

20

35

MR MOONEY: Hydrology, but the social, cultural, environmental and also economic, you know – rights, needs, aspirations of the communities.

MR BEASLEY: Sure. Just picking up on that, the fourth bullet point I take to mean that – in the same way an ability of an irrigator to extract water under a water entitlement will lead to, hopefully, an economic benefit for the irrigator, a cultural flow – or part of it, at least, will seek to achieve an economic benefit for the First Nations who have the right for that cultural flow under a particular water resource plan.

MR WOODS: That's right. That's all captured in the definition and we want to have an economic outcome.

MR BEASLEY: That might be as diverse as growing a crop through to selling parts of the water through to someone that wants it more.

30 MR WOODS: Yes, and to utilise that funding to have a cultural outcome there on their land for the First Nations people.

MR BEASLEY: I don't know if I'm going to ask a question about it, Commissioner, but in the document behind tab 9, in the MLDRIN brief there's an interesting graph concerning the amount of water allocated to traditional owners in Cubbie Station.

THE COMMISSIONER: Yes, I saw that.

- MR BEASLEY: I don't have any questions about that. If I can come back to no, I'm not going to come back to anything. What I'm going to go to now is do the witnesses have that folder, core documents? If you can share looking at the documents. The document that commences at tab 14. So this is part of three recent publications concerning cultural flow that have been prepared by the Cultural Flows.
- Planning and Research Committee. And these have essentially been done for MLDRIN, NBAN and the North Australian Indigenous Land and Sea Management Alliance, correct?

MR WOODS: Yes.

MR BEASLEY: And to what extent in relation to these three documents – what role has MLDRIN played in the preparation of them and the planning of them, etcetera?

5

25

MR WOODS: MLDRIN has been a core member of the Research Committee since the first exception meeting at Sydney Airport.

MR BEASLEY: I was going to ask you how long has this been going on as a result? How long as the work been going on?

MR MOONEY: 2011, I think, it was initially - - -

MR WOODS: 2011 was the first meeting. And implemented after the funding brief got up. The core members of the research team which was MLDRIN, NBAN and NAILSMA throughout the life of the project – MLDRIN overseeing the running. There was an Aboriginal owned and managed project so all of the decisions were made by the three Aboriginal organisations throughout the length of the project. We were there. Every decision that was made – MLDRIN was across it. And had input into the – into the research through our – our delegates who sat on that research.

We led with NBAN and MLDRIN – all the research on the ground with our consultants had input into how that was designed – culturally appropriate research undertaken in conjunction with the consultants. It was our document with MLDRIN, NBAN and NAILSMA that we led and produced with our each other organisations included.

MR BEASLEY: All right. Now, I'm going to wrap some things up into my language and so you don't have to adopt it and tell me if I don't get this right or I don't get it as completely comprehensively as you would like it, but I would be – am I right in saying that these three documents are really the initial – the outcome of the initial work that is – that is behind the desire to turn cultural flow from something that is a mere concept into something that has actually delivered water?

35 MR WOODS: Yes. It's a step towards that Aboriginal or cultural flows entitlement into the future.

MR BEASLEY: Delivered water. Ability to extract water.

- MR WOODS: Yes. And to be there with the knowledge and the data to back up our argument that we have been having over a number of years now through the community guide, identifying what those values are to be watered. So definitely it's a step towards the ownership of entitlements and delivered water.
- 45 MR BEASLEY: Yes. And in terms of sorry, did you want - -

MR MOONEY: Particularly if you review – reviewing the guide of First Nations which is under tab 15 and the law and policy research.

MR BEASLEY: That's the nuts and bolts of assisting Indigenous Nations or Aboriginal Nations to – how to prepare - - -

MR MOONEY: That's right.

MR BEASLEY: --- step-by-step to actually end up with something that looks like it could be incorporated into either a water resource plan or some sort of other agreement that provides a legal right to water.

MR MOONEY: Yes.

15 MR WOODS: Yes.

MR BEASLEY: All right.

MR MOONEY: That's correct. And I think, on your second point, in terms of how that would be included in statutory arrangements with – whether that's through a water resource plan; whether that's ownership of an entitlement or whether - - -

MR BEASLEY: These documents don't – yes, sorry.

MR MOONEY: --- that water is made available through a water resource plan, the paper or the extensive research on law and policy reform option does spell out some of those options.

MR BEASLEY: Yes. So that's – so the Dhungala Baaka publication is really an introduction.

MR WOODS: Yes.

MR BEASLEY: To the cultural flows that the ideas behind the cultural flows that the second document, as you said, behind tab 5 is the guide to how to go about doing it. Identify your objectives, identify what you want to achieve, work out who the people are with the expertise that need to - - -

MR WOODS: Yes.

40

45

MR BEASLEY: --- assist you including the scientific expertise, such as hydrology, ecology, all those sorts of things. And then move forward to the modelling and, in the same way that the MDBA has done it, work – because all you can do is modelling at the beginning, what flows and at what times and in what amounts and at what percentages of years, etcetera, will result in the amount of water that is needed for a culture flow in this instance. Correct?

MR WOODS: Yes.

MR MOONEY: Yes.

5 MR BEASLEY: And, as you said, also I think the document behind tab 15 – the pathway to cultural flows is how – what options there might be for turning that into a legal right?

MR MOONEY: It's spelt out – yes, the range of different approaches and options needed to give effect to those – those objectives once they have been documented by Nations. Once the Nations have determined their watering requirements, it's then how do you pursue those through both acquisition of water rights right through transforming the, sort of, governance foundations of the water management framework.

15

MR BEASLEY: Sure. And although you've used the water resource plan framework, this talks about water rights, licences, and also the creation of cultural water holder in some sort of analogous position to the Commonwealth environmental water holder.

20

MR WOODS: Yes

MR MOONEY: Yes. That's right.

25 MR BEASLEY: As someone to help manage the entire – I imagine, to manage the entire system of cultural flows.

MR WOODS: That's right.

- MR BEASLEY: All right. Is there anything more you wanted to say about those three documents because that's what I really wanted to cover with you about them? But if there is something additional you think the Commissioner should know, please
- MR MOONEY: I think just back in reference again to point 12 in our supplementary submission, that probably also speaks directly to existing requirement in the Plan to again have regard to cultural flows or have regard to Indigenous organisations' views about cultural flows. I think is the correct terminology. That's

40

MR BEASLEY: Yes. That won't get your water.

MR MOONEY: 10.54 in the Plan:

45 Must be prepared having regard to the views of Indigenous people with respect to cultural flows.

I think what we are, sort of, attempting to demonstrate here is there has been an extensive body of research and there is a growing body of information about what those watering requirements are, what those aspirations are, so we have moved beyond a position where we simply, sort of, talking about what people's views might be to actually moving to sort of an implementation phase, if you like, and so having – and again this goes back to that – the sort of model we want to move towards, which is around addressing the substantive needs or the rights of Nations as they have been documented.

So a Plan that just has regard to doesn't – doesn't afford that pathway to substantively addressing the right or the aspirations through actually allowing access to water. So having a Water Resource Plan that implements a program to deliver cultural flows again is again – it's speaking to that need for a substantive outcome rather than just a procedural requirement to have a conversation or seek the views of.

15

20

MR BEASLEY: Understood. And, of course, what the three documents we have just discussed go to is something very different from, for example, the Warrego-Paroo Water Resource Plan which provides for Aboriginal people to access water for economic uses but if it's supplementary water which may never exist at any particular time, it's what's leftover if there is something leftover. This is a very different thing; this is a concrete amount each year.

MR WOODS: That's right.

25 MR MOONEY: Yes.

MR BEASLEY: All right.

THE COMMISSIONER: Could I just ask you about a document you will find at tab 11 of the big bundle.

MR BEASLEY: Is this the correspondence? No. MLDRIN bundle or core documents?

35 THE COMMISSIONER: Core documents.

MR BEASLEY: Right. Okay.

MR MOONEY: The guidelines. Yes.

40

THE COMMISSIONER: Yes. It's the Water Resource Plans Part 14 Guidelines document from the Murray-Darling Basin Authority. I take it you are familiar with it?

MR MOONEY: Yes. We have actually had some input into reviewing – some input into the preparation of these guidelines. I think it's fair to say.

THE COMMISSIONER: I gathered that.

MR MOONEY: In a review – sort of a review capacity really.

- 5 THE COMMISSIONER: Sure. The whole of the document, but particularly its appendices 1 and 2, occur to me to represent very considerable, very substantial thought, deliberation, on the part of the MDBA about the necessary consultation. Is that fair or do you think I'm overestimating it?
- 10 MR MOONEY: I think I think that's fair, but from my recollection they are their recommendations only and they - -

THE COMMISSIONER: You anticipate my next question.

15 MR MOONEY: Yes. Guidelines.

25

30

45

THE COMMISSIONER: In practice – in practice has this document been followed through?

20 MR WOODS: Not fully by some of the states.

THE COMMISSIONER: Have you given any thought on the part of the First Nations you represent to reminding the Authority of the merits of this approach and suggesting that it should be followed?

MR WOODS: We remind the states and the Authority that is their document and it needs to be followed through with.

THE COMMISSIONER: Has there been any response to that reminder by you?

MR MOONEY: I think it's an ongoing conversation with all states about – with states and the MDBA and, you know, in concert together about how sort of a best practice approach to that consultation should be undertaken. I think it's fair to say there is probably a degree of – there are differences of opinion between the states and MDBA about how consultations should be run and how – and how plans should be

prepared and what the form – what the accredited text of a water resource plan should incorporate. Certainly, we have tried to push for the – you know, the best possible – best possible outcomes in both – in terms of you know high quality consultation and water resource plans that are responsive and provide substantive outcomes.

And we want to see plans that actually stipulate commitments, you know, that make – yeah, make formal commitments to progressing – whether it's recognise of rights through, you know, amendments to other water instruments for example, is one mechanism that can be used to give effect to the objectives that Nations express. You know, water sharing plans could be amended, long term watering plans and

other kinds of operational plans that dictate how a system is managed, they can be amended to give effect to those objectives, and I guess that's - - -

THE COMMISSIONER: So should I – am I correct in gathering that, so far as you two are concerned, this guidelines for part 14 document from the Authority is one that you commend and support? I don't want to put words in your mouth.

MR BEASLEY: You can take that on notice if you want.

10 MR WOODS: I will take that on notice

THE COMMISSIONER: Would you mind. Answer at whatever length and with whatever qualifications you would like. But I would like to have clear in my mind whether you two think this is a good document.

15

20

MR MOONEY: I think there are certainly some strong and positive recommendations and approaches outlined in it, but at the end of the day the question – you know, comes down to how – how compelled states are to actually follow that process and what the Plan – what the legal requirement in the Plan is to meet those – to meet what – these are more, you know, in some cases – I think there's two components to this. On the one hand it is guidelines outlining the approach that they would take to assessing the performance.

MR BEASLEY: That's the problem, isn't it, of four states and a territory, and you have got the law in the Basin Plan, but then you have got the Basin Authority, a Commonwealth authority setting out strategies that aren't binding on any particular state.

THE COMMISSIONER: That may or may not be a problem depending upon your view of federalism, but treating this not as binding, nonetheless I would be interested to know do you – do you think that your concerns that you have made submissions about to me would, as to process, not substance, but as to process, would observance of the recommendations of the guidelines document meet your concerns?

MR MOONEY: I think it also goes back to – I'm just trying to find the right section in the chapter 10 – the discretionary – so under 10.523:

A person or body preparing a plan may identify opportunities to strengthen the protection Indigenous values and Indigenous users.

40

Again that very discretionary opportunity, I think that's reflected again, what the guidelines don't do is say, "This is how you should go about amending the machinery and the instruments that sit behind the Plan."

THE COMMISSIONER: That's why I stress it's process – process, not substance. Yes.

MR MOONEY: It's procedural and the key thing is substantive outcomes is what –

THE COMMISSIONER: No, I do gather that. And I don't need you to spend effort on making that clear. I do understand that.

5

20

MR MOONEY: So in terms of a procedural - - -

THE COMMISSIONER: As to process.

10 MR MOONEY: Yes.

THE COMMISSIONER: I would be grateful. Thanks.

MR BEASLEY: On the fourth page of the document you just asked the witnesses to consider, you will see – unfortunately, it's not paginated, but the fourth page commences clearer guidance:

Guidelines also explain the focus of the MDBA's assessment when checking state WRPs and consistency with relevant Basin Plan provisions. All position statements are available on the website under water resource planning. While several are irrelevant, positions don't –

blah, blah – if you go down to the position – this 14A:

25 Aboriginal values and uses are of particular importance.

But, of course, if you go to that, it just telling you have regard to – you don't have to do anything else.

30 MR MOONEY: Yes.

MR WOODS: Yes.

MR MOONEY: And I think that's – from what we've seen that's evident in some states, in that the text that they have provided for accreditation where they – their response to some of those – some of the requirements in chapter 10 part 14 simply say we have had – we don't need to do anything more than stipulate – demonstrate the conversation we have had to demonstrate that we have had regard to. So there is no substantive response.

40

45

MR BEASLEY: Can I take you back to your supplementary submission behind tab 2, where you talk about amended definition of relevant international agreement, first of all, and then Ramsar sites. The recommendation you are making to the Commissioner is that the term relevant international agreement should be amended to relevant international instrument, and I take it that's because you want to pick up parts of the UN Declaration of the Right of Indigenous People that are otherwise not binding.

MR WOODS: Yes, that's correct.

MR BEASLEY: In relation to the Water Act should be amended to give clearer and stronger protection to Ramsar sites, first of all going to say that the Water Act already – and the Basin Plan as an objective, and I think even as a – I will just double-check that – as a general base upon which it must be prepared is to give effect to relevant international agreements, of which Ramsar is one, is – and that's set out in section 3, section 20A, section 21(1) of the Water Act. Am I – is the point you're making there that you want things spelled out in a clearer fashion?

10

15

5

For example, the kind of matters set out in the Biodiversity Convention regarding respecting preserving and maintaining knowledge, innovations and practices of Indigenous communities and protecting and encouraging customary use of biological resources. And I think in relation to Ramsar – and there's to be an incorporation of Indigenous knowledge into the wise use of wetlands, your preference is for those matters to be expressly stated rather than just saying implement international obligations.

MR WOODS: Yes, that's right.

20

MR MOONEY: Yes, absolutely. I think - - -

MR BEASLEY: So it's about – and I'm going to say a word that I probably won't pronounce correctly, specificity, is what's - - -

25

30

40

MR MOONEY: Yes. So more clearly specifying the need for management arrangements that include Aboriginal people in the management of those Ramsar sites. And again, that comes back to the strength of the provisions in the Plan which at the moment provide a means and have regard to – or requires states to have regard to rather than setting up more proactive and affirmative mechanisms to incorporate traditional owners in the active management of those sites.

MR BEASLEY: Right.

35 MR MOONEY: And again, it's about being consistent with guidelines that have arisen from the Ramsar convention.

MR BEASLEY: I skipped over part of your supplementary submission that I should come back to and that's – I didn't skip over it, I just ignored it. I didn't ignore it deliberately, but I'm coming to it now. Paragraph 8, the policy basis of this part of Act that is the new part of the Act you are contending for in terms of the recommendation to the Commissioner:

The policy basis of this part should include obligations on the Crown to act with honour and in good faith.

Now - sorry:

... good faith recognising First Nations processes of self-determination and to promote reconciliation and co-existence of sovereign authorities.

Now, a lawyer would have an understanding of, perhaps, a good faith provision in a contract, but an obligation on the Crown to act with honour, I'm not sure I quite understand what you're seeking there.

MR MOONEY: I think we would have to take that on notice to provide more detail there. But again, my understanding is that it refers back to the model provided through the Canadian approach where there is an understanding that in negotiations or in consultation that the Crown undertakes a commitment to – and this goes back to – from my understanding again it goes back to treaty arrangements in - - -

MR BEASLEY: Don't let me put words in your mouth as to what acting with honour means, but I was wondering what it meant, and one of the things I wondered about is that they act with a genuineness.

MR MOONEY: Yes. I think it's a genuine willingness to consider all perspectives and to be amenable to a negotiated outcome where – particularly where the matters at hand, or the issues being dealt with, or the potential impacts are of significant nature to – you know, to the cultural values of that Nation.

MR BEASLEY: And should the Commissioner consider the phrase "honour and in good faith" as incorporating one concept, or are they separate concepts, or do you need to take that on notice?

MR MOONEY: I think we will need to take that on notice.

MR BEASLEY: All right. I would like to move on to the – your – to the document behind tab 3, which is the submission that MLDRIN made to Mr Andrew concerning the Northern Basin Review. You have made submissions about the Northern Basin Review at paragraphs 58 to 65 of your main submission. First of all, can I just inquire: there was a response to this letter, wasn't there? Or not.

35 MR MOONEY: I don't think there would have been a response to that one.

MR BEASLEY: Okay. In terms of the substance of the submission you make, which is set out on the third unpaginated page of the submission – sorry – there is a heading Recommendations. Do you have that page?

MR WOODS: Yes.

25

40

MR MOONEY: Yes.

45 MR BEASLEY: So:

Any amendments to SDLs in the Basin must be based on proper science, including a rigorous assessment on the impacts of flows that are important to support Aboriginal cultural and community outcomes.

Now, over your focus, given what MLDRIN is, is in relation to primarily in relation to Aboriginal cultural and cultural outcomes, but the requirement to act on proper science is of course a paraphrase of the Water Act requires everything to be done on the basis of the best available science. As we know, the Northern Basin Review resulted in a 70 gigalitre reduction in water for the environment from 390 to 320. I can see you are contending it should be "At least 415." 415 was the upper echelon of the modelling scenario that the Basin Authority did for the Northern Basin Review. Is that where you have gotten that figure from?

MR WOODS: Yes.

15

20

MR MOONEY: Yes.

MR BEASLEY: And, however, the – the reports I've seen from the Basin Authority had even a 415 gigalitre scenario not reaching all the environmental watering requirements that the Basin Authority set for itself in the northern Basin. And I take it that's why rather than saying 415 it says, "At least 415'.

MR MOONEY: Absolutely. That's correct.

25 MR WOODS: Yes.

MR BEASLEY: And did you have any discussion – did anyone from MLDRIN, whether it was yourself or anyone else, any discussions with the MDBA during the course of the Northern Basin Review where a comprehensible explanation was given to you as to the scientific justification for the reduction of 70 gigalitres, or how 70 gigalitres gets reflected in – I am sure you are familiar with them, the so called toolkit measures of the northern Basin.

MR MOONEY: I think it's a - - -

35

40

45

MR BEASLEY: If it wasn't asked it's not a question that becomes relevant.

MR MOONEY: The rationale that was provided to us was that, based on an assessment of the environmental outcomes with a 390 or a 320 gigalitre target, there was a – the way it was presented to us, was that there was a minimal difference once you incorporated the toolkit measures. We don't – we don't have a – grounds to determine the accuracy of that statement and I think, based on a review of what we hear on the ground from – certainly through our engagement with NBAN, we didn't have confidence that – that, as you say, that the – that even the higher water recovery target would be achieving the sort of outcomes that they want to see, let alone a reduction. So we were concerned that the reduction would exacerbate the impacts they are already experiencing.

MR BEASLEY: And was one of the concerns also that the toolkit measures, things like protection of environmental flows and building fish ways and the other matters that make up the toolkit, were non-statutory and in other words they may or may not be taken up.

5

MR MOONEY: That's correct.

MR WOODS: That's correct.

MR MOONEY: We were concerned the toolkit measures, some of them – I think it's – it's – again, it's outlined in the submission, some were existing requirements. I think there's one around – that one of the tool kit measures was to engage with or to support better engagement with Aboriginal people, and as far as we are aware that's already a requirement – you know, in the Basin Plan. So – and I think we refer again there to the National Water Initiative, there's some guidance that was produced by – through the National Water Initiative in 2017 which outlines all those things already. So we didn't see them as sufficient – you know, as a sufficient offset to the kinds of impacts that would be likely to arise from further reduction in the water recovery target.

20

MR BEASLEY: All right. Behind tab 4 is your submission, again I'm not sure there's a date on this, but it must be relatively recent.

MR MOONEY: November 2017, that would have been.

25

MR BEASLEY: Right. In relation to the SDL proposed, any SDL adjustment. There's a couple of things I wanted to ask you about this particular submission, the first of which is on the second page, the fourth paragraph:

30

Traditional custodians have not been asked if we want the proposed package of supply measure projects or the adjustment in water recovery. We have not been allowed the agency or been provided with adequate information, to support informed decision making about the risks impacts and potential benefits arising from these projects and actions.

35

Just picking up that paragraph in your submission, I assume – and tell me if I'm wrong – there were some forms of – some form of consultation or workshop meetings where the MLDRIN had the opportunity to attend where there was some explanation given by the Basin Authority about the adjustment?

40

MR MOONEY: There's been – certainly, since 2012 - - -

MR BEASLEY: Yes.

MR MOONEY: There have been ongoing conversations about the SDL adjustment, but not – not what we would consider at the scale or detail to allow our membership

to come to an understanding or come to an informed opinion of whether that was a good outcome. Yes.

MR BEASLEY: Sorry, you complete your answer.

5

MR MOONEY: That's – I think that's it, really.

MR BEASLEY: Well, one of the things we know recently is that only recently have a number of business cases for these particular supply measures been made publicly available. Tell me if I'm wrong, but were they made available to MLDRIN? For example, during the course of any consultations you had with the Basin Authority?

MR WOODS: We were lucky enough to see some of the Victorian business cases, but the rest of the SDL projects we hadn't seen.

15

10

MR BEASLEY: When you say "lucky enough", that was because the Victorian Government decided to give them to you?

MR MOONEY: We asked.

20

MR WOODS: That's right. We asked.

MR MOONEY: We asked and we were provided with some of the business cases for the Victorian supply measure projects.

25

MR WOODS: Yes.

MR BEASLEY: And did that process go so far as you – MLDRIN being provided with some of the MDBA's analysis of these supply measures that have recently only turned up through a process in the Senate?

MR MOONEY: Not – not analysis of the individual offset - - -

MR BEASLEY: Right.

35

40

45

MR MOONEY: --- volume or how each of those individual supply projects fitted into the recover – sorry, the offset of the recovery targets.

MR BEASLEY: You may or may not be aware but some of the MDBA's analysis of some of these supply measures identify a series of potential environmental risks as a result of these supply measures. One that's been frequently mentioned to the Commissioner is the Menindee Lakes supply measure with the possible reduction of – for large percentages of time of about 23,000 hectares of Golden Perch habitat, as an example. But that's one example. There are many others where environmental risks are identified, or the Basin Authority is going as far as saying, "This supply measure doesn't seem to cut the mustard," if I can use that term, "in relation to environmental equivalency." Given you said you weren't given any of that analysis,

were any of those risks orally mentioned to you by the Basin Authority in the course of any meeting concerns or engagement concerning the SDL adjustment?

MR MOONEY: I don't think that they were adequately addressed, no. I think we – 5 we pushed very hard to gather as much information as we could about the risks of these projects, and we – we expressed the risks.

MR BEASLEY: There is no doubt you asked because in the next page of the document I'm taking you to the third paragraph from the bottom:

10

Our membership want to understand how the operation of the SDL will impact on plant and animal species that hold particular cultural significance to them.

MR MOONEY: Yes. So we had – we had asked - - -

15

MR BEASLEY: What was the response to that?

MR MOONEY: Well, we had asked over the course of, I think, between 2015 and then the final decision around the amendment. We had asked to see modelling that would allow us to understand the impact of those – of the change in water recovery 20 target on the cultural outcomes for Nations throughout the southern Basin. We were told that – I want to make sure that I get this right – the option that was provided to us was that if we could -it's contained in one of those bits of correspondence there - if we could specify the watering requirements for particular cultural values at 25 particular locations, then the authority could tell us what the potential outcome would be.

And our response to that was, "Well, we don't have that information, and in fact no one does, so how do we come to informed understanding of the impacts?" When it 30 comes to the environmental risks, I think we had raised again in correspondence concerns – probably more focused around the cultural risks, but something like the Golden Perch for example, is an environmental impact, but it's also a cultural – has cultural consequences as well because Golden Perch are a significant species from a cultural perspective as well as a – just practical resource perspective and environmental perspective.

35

MR BEASLEY: Does that apply to all native fish?

MR WOODS: Yes.

40

MR BEASLEY: I've just been handed a note, were you provided with the Gunbower business case?

MR MOONEY: Yes.

45

MR WOODS: Yes.

MR BEASLEY: Right. And what about the MDBA analysis of it, though?

MR WOODS: Not that I can recall.

MR BEASLEY: Is that – the note tells me, and I'm – is that it – the MDBA analysis mentions the fact that there's a lack of any documentation about cultural heritage in that business case. Is that something that you picked up in your analysis of it?

MR MOONEY: That's certainly something we would be concerned about. Yes.

We did undertake analysis of those business cases and we can certainly take that on notice to provide our – we actually did some analysis of each of those cases and prepared some summaries on that. So I can certainly provide that. But I guess a case in point was again, in relation to the demonstration of broad community support for those projects, which is a requirement of the phase 2 guidelines - - -

15

30

MR BEASLEY: Yes.

MR MOONEY: We were concerned that evidence that was tendered by states or by proponents to indicate broad community support or community support from the Aboriginal people were pro forma letters signed by individuals.

MR BEASLEY: Yes.

MR MOONEY: And we don't consider that that's adequate evidence of broad community support.

MR BEASLEY: All right. You have been kind enough to supply us with both a record of correspondence you've had with either Basin Officials Committee, the MDBA, and various relevant state ministers raising concerns about matters such as the SDL adjustment. Commissioner, I think these letters speak for themselves, so going through them is probably - - -

THE COMMISSIONER: No.

- MR BEASLEY: --- not the best use of time. But for reference to the transcript, the record summary is behind tab 11 and the correspondence starts at page 12 with a letter to Mr Parker of the Basin Officials Committee, from MLDRIN, 20 December '15 as far back as then with concerns about matters concerning how the sustainable diversion limit adjustment mechanism is going to work. You've included in the bundle you've given us the responses you've been given from time to time. The only one I thought really drawing to the Commissioner's attention, I noticed that at tab behind tab 14 is a letter from MLDRIN signed by Darren Perry, who must have been the Chair before you, was he - -
- 45 MR WOODS: Yes, that's correct.

MR BEASLEY: --- Mr Woods, to Mr Andrew, who was the chair of the MDBA concerning cultural implications of the supply measures and the SDL adjustment. And that letter seeking information – and your letter goes to the detail of actually raising the environmental equivalence methodology in the second page and seeking an understanding and information from the Basin Authority about how this is going to work. Just for the Commissioner's reference, the response from Mr Russell James, the Executive Director Policy and Planning for the Murray Darling Basin Authority, a response dated 25 January 2016, second paragraph:

10 The MDBA is committed to a rigorous and transparent implementation of the SDL adjustment mechanism.

Which seems to fly at odds with the failure to provide. I'm wondering whether you agree with this, seems to – the claim of rigorous and transparent implementation, that's not a phrase I would personally apply and I'm wondering whether you think it's a proper description given that these business cases were, (a) very hard to get hold of, and (b) the MDBA's analysis of them only became publicly known through compulsive processes of the Senate.

MR WOODS: It wasn't rigorous, that's for sure. We knew nothing about them, most of the projects.

THE COMMISSIONER: That suggests it wasn't transparent either.

25 MR WOODS: Definitely.

5

15

35

45

MR MOONEY: And I think it goes to the third paragraph, really, there. The acknowledgement in that response that the method - - -

30 MR BEASLEY: Someone is just telling me to yes.

MR MOONEY: --- to assess the SDL does not explicitly take into account the potential impact. So it was – those considerations are written out of the methodology.

MR BEASLEY: Yes.

MR MOONEY: We had to really fight to - - -

40 MR BEASLEY: Well, he's being transparent there, at least.

MR MOONEY: Yes. We have to fight to get that sort of information, and we didn't – in the end we weren't able – we still don't have an understanding of how the two key issues we raised – one was the cumulative and system-wide impact on cultural heritage arising from the construction and operation of those projects, and, two, the – the impact on cultural – on cultural outcomes or Aboriginal objectives from the offset of water recovery in those areas where the – again, it gets into the

complexity of this process, but the areas where the offset will result in a diminished outcome which the modelling shows, the modelling shows that in some reaches, in some sections of the system outcomes for certain ecological factors will be – will be negatively impacted from a benchmark scenario of 2,750 gigalitres we want to understand what those impacts will be on Aboriginal cultural values and we haven't been able to –we haven't been provided with that information or supported, necessarily, to get that information.

MR BEASLEY: All right. If I can get you to turn to – much what we have just discussed covers what's in your primary submission to the Commissioner. But if I can get you to go back to tab 1, which was your submission to us – the submission to the Commission, 7 June 2018. I just wanted to pick up paragraph 48 where you talk about the constitutional basis for the Water Act. And you are questioning:

Whether the Water Act and the Basin Plan are a proper and correct (proportionate) expression of Australia's commitments under international agreements.

I'm just wondering whether – the Water Act, of course, does require the Basin Plan to be prepared with the objective of implementing our obligations under international agreements. I think we've discussed that you want some more specificity in terms of what those – the content of those obligations are. Is that the extent to which you're questioning the Water Act?

Leave aside the Basin Plan, because the Basin Plan – at least insofar as it sets out what an SDL is – may have the problems that you've talked about in terms of issues a page or two earlier on in the submission. But is there something further in the Water Act other than the specificity we discussed about international agreements or do you want to take that on notice or - - -

MR MOONEY: I think the key on the proposal – the proposed amendments are included in the supplementary submission. But in relation to - - -

MR BEASLEY: Right, yes.

5

30

35

MR MOONEY: But in relation to paragraph 48, whether the Water Act is a proper and correct expression of Australia's commitment under those agreements, I guess I pointed to things - - -

MR BEASLEY: That might depend on how you construe the Water Act. If you are construing the Water Act as such that the setting of the sustainable diversion limit reflecting an environmentally sustainable level of take enables you to do that by taking into account, in some unknown fashion, economic and social objectives that would mean that you might be throwing in doubt whether you are implementing international obligations.

That might cause some legal issues, of course, if you interpret the – those provisions of the Water Act such that you set an ESLT by environmental criteria first – bearing in mind, judgments have to be made about what are key environmental assets and key ecosystem functions and then, having done that, you optimise the use of the water resources so as to – sorry, you use the water resources of the Basin so as to optimise economic, social and environmental matters, then things might not cause any difficulties in terms of meeting international obligations or lawfulness, etcetera.

MR MOONEY: That would certainly help to ameliorate some of the impacts. I think. I think but just to - - -

MR BEASLEY: In any event, do you want to give some consideration as to what you mean in a more detailed way about whether the Basin Plan is a proper and correct expression of Australia's commitments, or - - -

15

20

25

30

5

MR MOONEY: Yes, but I think – if I can point back, I guess the easiest way to probably, sort of follow the logic through here, referring back to our – in paragraph 7 of the main submission – sections 21 and 22 of the Act do not provide adequate or appropriate consideration or protection of First Nations' rights and interests. We refer to them as "wink requirements" which are not in alignment with the language and an understanding of article 8J, certainly the convention in biological diversity refer – uses a much more affirmative language around respect, preserve and maintain approval, involvement, promotion and encouragement which is distinct from and creates a more robust approach to the involvement of Indigenous people than the language of "having regard to".

So I guess the key deficiency we are noting there or the key, sort of, misalignment is around the strength to which the provisions in the Water Act, if you like, empower or provide an affirmative commitment to progressing Indigenous rights and interests. So it's not in the spirit of what's in the convention of biological diversity, if I can put it sort of bluntly.

MR BEASLEY: Yes. Yes.

MR MOONEY: You know, again it's detailed a bit more at 19 – at paragraph 19. The approach of the former can be said to be premised upon an active effective and influential involvement of Indigenous communities in decision-making, directed to benefit and support the integrity of Indigenous peoples. Whereas what we see in the Water Act is the – in sections 21 and 22.

40

MR BEASLEY: I see, you are really focusing on these sort of afterthought of the Water Act, if I can call it, that saying - - -

MR MOONEY: Exactly.

45

MR BEASLEY: --- the purpose of the Basin Plan is to provide for, sorry, let me just pick it up -21(4). Yes, thank you. You're talking about the sort of afterthought

in 21(4) of the Water Act, where, in exercising the functions of the Authority of the Minister, Indigenous issues is - is down in - -

MR MOONEY: Yes.

5

MR BEASLEY: Well, I call it "afterthought territory". I think – I won't - - -

MR MOONEY: Yes. Buried.

MR BEASLEY: I won't use the term, but a witness yesterday said "tokenistic" type

MR WOODS: Yes.

15 MR BEASLEY: --- way it's recorded in the Water Act. In fairness ---

MR MOONEY: The way that's - - -

MR BEASLEY: --- the Basin Plan is more detailed than that in terms of Indigenous engagement.

MR MOONEY: But the way that then flows through into the Basin Plan has the effect of subordinating Aboriginal rights and interests.

MR BEASLEY: But it still uses the language of "have regard to" as well, that we've discussed.

MR MOONEY: That's right, so - - -

- MR BEASLEY: The last thing I want to discuss with you is coming back to the extent of consultation but, in relation to your original submission commencing at paragraph 51 about the SDL adjustment mechanism, at paragraphs 53 and 54 you talk about the inadequacy about the process of consultation and engagement.
- But in 54 you give a specific example that I think we heard from a witness yesterday from Ms Morgan, about workshops conducted by the MDBA concerning the SDL adjustment mechanism may have taken place in about September last year. Where you say provided with only "one week's notice", it's am I right there's a kind of double whammy here, in the sense that sorry, September may have related only to
- Deniliquin; it may they may have been different dates in different places, but 54 doesn't expressly say it but there's a sort of double whammy here, isn't there, that you're given one week's notice but you are not given any information anyway - -

MR WOODS: That's right.

45

MR BEASLEY: --- to actually engage, and consult and participate. If you don't have all the business cases and you don't have their analysis. It's very hard to say

5 MR WOODS: That's right.

MR MOONEY: I think a key point there, was that we were concerned, in terms of a consultation that on a project-by-project basis there may be some consultation with local traditional owners about, you know, "Here is a proposed supply measure, to happen on your country. Do you support the idea of us – you know, do you support the idea of building some more infrastructure that will allow us to water this higher floodplain?"

Invariably, you know, communities are excited about that prospect but they haven't necessarily been informed that that infrastructure and that outcome entails a reduction in the overall recovery target across the Basin – across the southern Basin, so in understanding the whole scope of - - -

MR BEASLEY: But not only that, a regulator may achieve some good things and it may achieve some negative outcomes too. A regulator is an example that would water part of a wetland or a floodplain but that is an entirely different thing from even an ecological perspective of a higher flow that is a natural inundation of land.

MR WOODS: Yes. Yes.

25

10

MR BEASLEY: And that needs to be discussed too - - -

MR WOODS: Absolutely.

30 MR BEASLEY: --- as to what these alternatives are. That completes the questioning I had, Commissioner. Do you have any further questions before ---

THE COMMISSIONER: No, I don't.

- 35 MR BEASLEY: Consistent with the approach to all other witnesses, is there anything further apart from the matters you are taking on notice, is there anything further you would like to draw to the Commissioner's attention today in relation to his Terms of Reference and meet the issues that are of focus?
- MR MOONEY: There was only one point, which I think was just, as we were progressing with the conversation, I don't think we got quite back to answering your question around a middle line between "having regard to" or that very weak requirement and a right of veto, which you've raised as unrealistic in this context. I think it goes back to the issue of a substantive outcome. And, again, it's sort of
- detailed in paragraph 41 of first submission that the idea of deep consultation includes the requirement to be prepared to test proposals and amend in pursuit of agreement and reconciliation.

THE COMMISSIONER: Yes. Yes. Some real to and fro.

MS MORGAN: It comprises substantive demonstrable scope for change or amended outcomes as well as the procedural obligations. So what we see in the current plan arising from those – from the Act is it's essentially a procedural requirement; it's a requirement to have a conversation but not to amend outcomes based on what's submitted in that conversation. And that's – that's really where it's falling down. I think that's sort of where we are moving towards.

10 THE COMMISSIONER: Thank you.

MR BEASLEY: Thank you very much for that and thank you for your submission.

THE COMMISSIONER: Gentlemen, I'm much obliged for your care and assistance. Thank you.

MR MOONEY: Thank you.

MR BEASLEY: That completes the evidence for today.

THE COMMISSIONER: Thank you.

<THE WITNESSES WITHDREW

[3.38 pm]

25

30

35

20

5

MR BEASLEY: Just for next week, we will reconvene at 10 am on Tuesday. The witnesses for next week on Tuesday are Ms Bradbury who is from the Murray-Darling Association, who I think is in the body – representing the local government; Mr Clements, who was on the Northern Basin Advisory Committee; and Mr Rendell is an author of one of the economic reports that was criticised by Professor Wheeler.

Tuesday is Mr Johnson, a former employee of the MDBA, who had a role in the Northern Basin Review and Dr Mallen-Cooper who is an ecologist, a fish expert who wishes to – who has filed an environmental equivalency test and what he says is its inadequacies in relation to living things that actually live in a river as distinct from a floodplain.

- And on Thursday we have Professor Grafton, who is an economist from ANU, who will largely talk about his concerns about return flow and then we have Mr Cole, also, giving evidence by Skype. Coal is from Barwon-Darling Water, an irrigator body irrigator representative body. And that will complete the evidence for next week.
- THE COMMISSIONER: Thank you. We will adjourn until 10 o'clock here on Tuesday. Thank you.

MATTER ADJOURNED at 3.38 pm UNTIL TUESDAY, 24 JULY 2018

Index of Witness Events

STEPHEN JAMES ROBERT WHAN, ON FORMER AFFIRMATION	P-1109
EXAMINATION-IN-CHIEF BY MR BEASLEY	P-1109
THE WITNESS WITHDREW	P-1145
DAVID ANDREW HARRISS, SWORN	P-1146
EXAMINATION-IN-CHIEF BY MR O'FLAHERTY	P-1146
THE WITNESS WITHDREW	P-1205
RENE PAUL WOODS, AFFIRMED	P-1206
WILLIAM MOONEY, AFFIRMED	P-1206
THE WITNESSES WITHDREW	P-1242

Index of Exhibits and MFIs