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**TRANSCRIPT OF PROCEEDINGS**

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O/N H-927210

**MR B. WALKER SC, Royal Commissioner**

**IN THE MATTER OF THE MURRAY-DARLING BASIN ROYAL COMMISSION**

**ADELAIDE**

**10.01 AM, THURSDAY, 23 AUGUST 2018**

**Continued from 16.8.18**

**DAY 19**

**MR S. O'FLAHERTY, Junior Counsel Assisting**

MR O'FLAHERTY: Commissioner, before I begin, I would like to point out that we acknowledge this land that we meet on today as the traditional lands of the Kurna people and that we respect their spiritual relationship with their country. We also acknowledge the Kurna people are the custodians of the Adelaide region and that cultural and heritage beliefs are still as important to the living Kurna people today. We also pay our respects to the cultural authority of Aboriginal people visiting or attending from other areas of South Australia or present here today.

Commissioner, we've got three witnesses scheduled for today. First of which is Mr Mal Peters, OAM, who was the chair of the Northern Basin Advisory Committee as part of the Northern Basin Review. Following him I will call Mr Geoffrey Wise who was also on that committee. And the third witness for today is Mr Chris Bagley who is a dryland farmer just outside Milang near Lake Alexandrina in South Australia. Tomorrow we have representatives of the Australian Floodplains Association giving evidence and following them, Mr Mark McKenzie of the New South Wales Irrigators' Council.

THE COMMISSIONER: Thank you.

MR O'FLAHERTY: Before I call Mr Peters, I will just indicate that, Commissioner, you would have – may have seen reference to a hydrological modelling report for the Northern Basin Review. That's particularly referred to by Mr Wise in his materials. I have got a copy of that. It's not an easy read. I wasn't able to read it last night. I gave myself an early minute last night, but I will – I do intend to tender that in due course.

THE COMMISSIONER: Thank you.

MR O'FLAHERTY: So I call Mr Mal Peters.

**<MALCOLM JOHN PETERS**

**[10.03 am]**

**<EXAMINATION-IN-CHIEF BY MR O'FLAHERTY**

THE COMMISSIONER: Please sit down, Mr Peters.

MR O'FLAHERTY: Mr Peters, you've provided a witness statement, I believe, to the Commission dated 16 August 2018; is that correct?

MR PETERS: That's correct.

MR O'FLAHERTY: Do you have a copy of that?

MR PETERS: I certainly do, yes.

MR O'FLAHERTY: Excellent. Is that statement there consisting of six pages true and correct, to the best of your knowledge and belief?

5

MR PETERS: It certainly is, yes.

MR O'FLAHERTY: Thank you. I tender the witness statement of Mal Peters dated 16 August 2018.

10

THE COMMISSIONER: Thank you.

MR O'FLAHERTY: Mr Peters, I understand you're a predominantly cattle farmer in northern New South Wales; is that right?

15

MR PETERS: That's correct, yes.

MR O'FLAHERTY: And whereabouts in New South Wales is your property?

20 MR PETERS: About 80 ks north of Inverell, about 40 ks under the Queensland border. I run about 800 cows and we turn off about 700 calves each year.

MR O'FLAHERTY: Do you also have an irrigation licence as well?

25 MR PETERS: I certainly do. I've got three centre pivot irrigators.

MR O'FLAHERTY: And is that mainly for feed?

MR PETERS: For feed for the cattle, yes.

30

MR O'FLAHERTY: You've – in your statement you've outlined in brief your no doubt very long history of involvement in the community. I just wanted to touch upon one aspect of that. In paragraph 5 of your statement you refer to the work you were doing in the Namoi Valley and in particular working with hydrological modelling and interaction with the community. You were stating in that role, in the last sentence of that paragraph, you were required to help the community gain confidence in the modelling process. Could you just expand upon that? Was there a lack of confidence in that process before or how did that go?

35

40 MR PETERS: Certainly. It was a \$5 million study, the New South Wales Government had commissioned to understand what the impacts on the Namoi Valley water was of coal seam gas and coal mining but it was a critical component of the study that – I mean, obviously, the science was paramount but if the community didn't have confidence in what we did there was little point in the exercise.

45

MR O'FLAHERTY: Yes.

MR PETERS: So I was charged as the Chairman of the Ministerial Oversight Committee to liaise very closely with the Stakeholder Reference Group who were a community-based group to bring them across how the modelling was going and particularly to give them confidence in how it happened. I was given a  
5 hydrogeologist exclusively for the Ministerial Oversight Committee to advise us on the technical matters because we weren't technical people.

MR O'FLAHERTY: Sure.

10 MR PETERS: Mr Ross Best from Coffey Geotechnics. I also had on my committee Peter Baker from the Commonwealth Environment Department who was a hydrogeologist as well and we commissioned.... Water Services who had quite a staff of hydrogeologists, so we had a wing of experience around us and we went to a lot of trouble to try and get – I mean, the community inherently had distrust in  
15 modelling so we busted a gut trying to get people to have confidence in it, which I thought we did a reasonable job.

MR O'FLAHERTY: Yes, I was going to touch upon that, how did you - - -

20 THE COMMISSIONER: Just before you do, it was a Ministerial Oversight Committee?

MR PETERS: Yes, the Minister set up a - - -

25 THE COMMISSIONER: Which Minister?

MR PETERS: In New South Wales, they change more than bloody Prime Ministers.

30 THE COMMISSIONER: Don't exaggerate.

MR PETERS: Look, I think it might have been the bloke who ended up in jail. I can't think of his name.

35 THE COMMISSIONER: Mr Obeid.

MR PETERS: No, his mate.

THE COMMISSIONER: Mr McDonald.

40

MR PETERS: McDonald, yes, that's correct.

THE COMMISSIONER: Thank you.

45 MR O'FLAHERTY: And so how would you rate the success, in terms of – am I right in imagining that it was largely a process of trying to in one way translate the

technical materials from the modellers into something that could be digested more easily by the community; is that fair?

5 MR PETERS: Absolutely. I mean, people – people needed to get their head round what the assumptions were that the modellers were using so they could look at that say, yes, that makes sense, that’s okay. You then run some sensitivity analysis so you try different – not scenarios, wrong word, you use different numbers that you will run and say, well, if we use this this will - - -

10 MR O’FLAHERTY: Different inputs.

MR PETERS: That’s a high case, that’s a low case, this is in between so people can get a level of confidence whether that’s right. And then we let them choose some scenarios that were run so as they could – they could say, righto, we’ve had an input  
15 in that. So I think with that process there was a – I think it’s fair to say there was a level of confidence in the Namoi water study.

MR O’FLAHERTY: I’ve asked you that because if I take you to page 5 of your statement, paragraph 42 that’s where you’re discussing your impression of the  
20 MDBA’s approach to a similar process in the context of the Northern Basin Review where you say that it was too difficult – so where you say the former Chief Executive stated words to the effect it was too difficult for the community to get their heads around the modelling. I take it you would disagree with that assessment.

25 MR PETERS: Very strongly. We – when I had just come out of the Namoi situation where we – you know, we busted ourselves trying to make sure the community were across it and I thought we were reasonably successful. These guys didn’t even – weren’t even prepared to have a bash at it. So I found that really strange.

30 MR O’FLAHERTY: All right. Now, just – I wanted to explore your experience as the Chair of the Northern Basin Advisory Committee. In paragraph 7 you state that against your background, Mr Knowles, who was the Chair at the time of the MDBA, asked you – did you know Mr Knowles before then?

35 MR PETERS: Yes. I had worked with him when he was in the health – I was president of the New South Wales Farmers Association and I had worked with him on a health matter getting rural doctors and also when the Water Sharing Plans were done in New South Wales as well.

40 MR O’FLAHERTY: And you – that process started in about 2012 and there were other committee members. What was the broad make-up of the committee in terms of its individual members? Who was on that committee? Where they were from?

45 MR PETERS: Sure. Well, it was a liquorice allsorts – that’s probably not a technical term – but I mean, we had a full gamut of representation across the environment. So we had irrigators. When I say “irrigators” we had two former

Executive Officers of the water bodies of the Border Rivers Food and Fibre and – actually I had three, I had one from Namoi as well and a guy from Border Rivers Food and Fibre so I actually had three former EOs. I had two Mayors to represent the community, Moree and Goondiwindi – Moree and St George. I had floodplain farmers. I had Aboriginal representatives. I had environmental representatives and just ordinary old farmers. So it was a pretty broad church and when I was given the commission, I think the words were used, you know, you’re going to test all your skills trying to make this all – from killing each other.

10 MR O’FLAHERTY: And eventually - - -

THE COMMISSIONER: I take it you understood and appreciated that it was intended to be a disparate group in order to supply useful consultation?

15 MR PETERS: Absolutely. I – as time evolved I thought it was actually a pretty smart group put together and none of them were shrinking violets. They all had pretty strong opinions so it gave a really balance for what we were going – where we were going.

20 MR O’FLAHERTY: And how regularly from 2012 would the committee meet?

MR PETERS: I’m not sure whether it was monthly but bi-monthly probably, yes, so it was pretty regularly.

25 MR O’FLAHERTY: And was – I will touch upon your interactions with the MDBA throughout that process but eventually you were able to provide a report and you’ve got a folder in front of you, Mr Peters, with your name on it. It should be – I’ve been burnt before, but it should be behind tab 4 – he asks hopefully.

30 THE COMMISSIONER: Yes, it is.

MR O’FLAHERTY: Excellent.

MR PETERS: Yes.

35

MR O’FLAHERTY: And in terms of – so you’ve got that report, Mr Peters?

MR PETERS: Yes, I have. With a handsome group of people on the front of it.

40 MR O’FLAHERTY: Indeed. So if we turn to page 5 you can see the committee members all lined up there. This is exhibit RCE133. Who was the primary – sorry, how did this report come to fruition? Was it a – was there a particular drafter who drafted the report? Was it a collaborative effort? Did you draft it and circulate drafts? How was the process – how did the process evolve?

45

MR PETERS: We – well, we sought initially to try and commission someone to do it. Trying to get them across the detail of it was too hard.

MR O'FLAHERTY: Sure.

MR PETERS: So we determined it had to be really be done by one of the committee members and Michelle Ramsay ended up doing the - - -

5

MR O'FLAHERTY: Right.

MR PETERS: I mean, she worked closely with Sarah Miles and the rest of the committee, so there was a – but Michelle did most of the work on it.

10

MR O'FLAHERTY: And - - -

MR PETERS: I did exclude earlier Geoff Wise, who's probably in the room, as a member of the committee so that's not very good of me. He was importantly the former Western Lands Commissioner and Mayor of Bourke and you will have all the rest of that when he comes, no doubt.

15

MR O'FLAHERTY: Yes. And so does this – this report is the representative of the disparate views. How did the committee members approach – well, I presume that the committee members agreed to the contents of this report?

20

MR PETERS: Yes. Well, they did, they signed off on it but I guess in fairness to them, towards the tail end of it, it was getting pretty pushed and I'm not sure how, you know, how strong the ownership was but - - -

25

MR O'FLAHERTY: Right. In terms of – so that report was finalised in October 2016, and, in your statement, you talk about the fact that you recall the MDBA acknowledges its receipt and that there was a discussion between the MDBA and a committee about the report. Was that a formal meeting called after October or was that more of an informal discussion?

30

MR PETERS: Look, my recollection – and I'm not very strong on it – I think there was a general discussion. I don't recall a formal going through. It sort of – as I recall, it came out, and things sort of rushed through, and I don't remember us sitting down and the detail – go through by the MDBA with it.

35

MR O'FLAHERTY: And I take it there wasn't a formal response from the MDBA in respect of the number or the list of suggestions and recommendations?

40

MR PETERS: Not my recollection, they latched on to the toolkit issue, and that then became part of the solution to all their problems.

MR O'FLAHERTY: Yes. Okay. In terms of the – so in – just following the committee's report the MDBA released its report in November 2016, Northern Basin Review. Now, I understand you made a submission – a personal submission in respect of that Northern Basin Review. That should be behind tab 2 of the folder in

45

front of you there. What was the reasoning? Why did you feel it necessary to make a separate submission outside of the committee process?

MR PETERS: I became – I became quite concerned about – I mean, I had  
5 approached this whole process on a balance issue. I mean, I'm an irrigator. I'm a  
farmer representative. So I have a bias towards that. But I was very, very conscious  
of making sure that we had due regard to environmental and community issues.  
What had come out – I mean, in the modelling – and I refer to it in one of my  
10 submissions, the – the modelling had shown that they weren't going to get many of  
the environmental targets, and it's the one I can't find a copy of it. I don't think they  
gave me a hard copy about it. They put up a model that showed out of the nine  
targets that I recall they were getting one of them or something. I can remember  
making a statement, well, why the bloody hell are we doing this? What's the point  
of it? I mean, the whole point of spending \$13 billion of public money is to try and  
15 fix the environmental part of it, and we weren't getting it. So then I try and reflect  
on all these components that I speak about, and it started to get up my nose, and I  
think also I had read there had been EDO or one of the other groups had made some  
- - -

20 MR O'FLAHERTY: Freedom of information requests. Yes.

MR PETERS: Yes, FOIs, and information to come out of that where people had  
received information from MDBA that we hadn't got, and I think also following the  
pump show on ABC, there was also the discussions that were held between the head  
25 of New South Wales Water who subsequently was sacked.

MR O'FLAHERTY: Mr Hanlon. Yes.

MR PETERS: No, he left. I shouldn't say that, and the discussions that irrigators  
30 had had. So quite clearly, some of the irrigators on my committee were – had been  
privy to those conversations. So I mean, I – the honesty integrity was a bit shaky.

MR O'FLAHERTY: You refer to the model run and the deficiencies in the model  
in that submission, and you also refer to that in your statement. This is at paragraph  
35 13 of your statement. You talk about there being a sense of overt secrecy from the  
MDBA about their modelling processes. I wonder if you could explain a bit more  
about that. What you mean by the secrecy behind the modelling, is that - - -

MR PETERS: Well, that's the point we touched on when we first started. I was  
40 seeking – when I started the process it seemed to me that, you know, you had to  
make the community confident that the modelling was not all rubbish. But I couldn't  
get – I couldn't get the MDBA to give the information to be able to, you know, let  
the community know what was going on. So – and I mean, we had countless  
meeting with a number of their modellers, and I've been round long enough to know  
45 whether we – we weren't being told the truth.

MR O'FLAHERTY: And so when you were having these meetings were these with the – so I take it from what you just said these were meetings you were having directly with the modelling staff of the MDBA.

5 MR PETERS: Yes. There's a methodology in bureaucracy for trying to shut down  
the scent. So you go through this complicated process, and they talk to you in this  
great convoluted language, and you're meant to sit there and nod your head. I had  
been through it in the water study and I used to turn round and say to Ross Best what  
10 the bloody hell does that mean. I felt I was being snowed, and I couldn't get the  
truth about what was going on. And, I mean, when I became aware of the omission  
of the 2012 Barwon-Darling Water Sharing Plan in the modelling which had major  
impact and keeping in mind that that's a funnel, all the Northern Basin goes down to  
the bottom of a funnel, and here's something that had had a major change, and we  
15 didn't seek that in the modelling, I mean, that's just – that's rubbish. That just  
doesn't make sense.

THE COMMISSIONER: What should I understand to be the elements of the major  
change? Was it the capacity to pump more and at lower levels?

20 MR PETERS: Yes, bigger pumps.

THE COMMISSIONER: And at lower levels.

MR PETERS: Yes. Keeping in mind – I mean, the MDBA used to throw back...  
25 114 year average, it will all work out in the wash.

THE COMMISSIONER: But we will all be dead.

MR PETERS: Well, that's the problem. I mean, if 40 years of the 114 were... well,  
30 I mean, that's where Geoff's work was excellent. It showed a bit of common sense  
by using the – you know, what the new rules would allow it, if irrigators utilised  
them all.

THE COMMISSIONER: Yes.  
35

MR PETERS: That one in three years there would be no water in the river, and  
that's what's starting to happen.

MR O'FLAHERTY: You say – this is in paragraph 14 of your statement – you  
40 became aware of the fact that the 2012 changes to the Water Sharing Plan weren't  
incorporated in the modelling. Was that around the time of the production of the  
hydrologic modelling report from the MDBA which is a report dated January 2006?  
Does that recall? Sure.

45 MR PETERS: Look, I can't recall that. So one of the technical blokes will have... I  
don't - - -

MR O'FLAHERTY: That's fine.

MR PETERS: But I can give you something that come to me last night which I will  
5 send to you, was an email that was sent from Ed Fessey who was the floodplain  
farmer from our committee who wrote to, I believe he wrote to ---

MR O'FLAHERTY: Ms Durham.

MR PETERS: Yes, you've got a copy of this, have you?  
10

MR O'FLAHERTY: Yes.

MR PETERS: I mean, this is -- really blows you. I mean, it just says quite -- without  
-- you know, it's irrefutable evidence that they did not include the Barwon-Darling  
15 Water Sharing Plan.

MR O'FLAHERTY: Yes. So I've been provided a document from Mr Wise which  
I think -- Mr Fessey has also provided this same document to him.

MR PETERS: Excellent. Good, good.  
20

MR O'FLAHERTY: And this is a document with the title 'Questions from Edward  
Fessey'.

MR PETERS: Yes.  
25

THE COMMISSIONER: I should understand this was a -- this is the text of  
something that was emailed from Mr Fessey to whom?

MR O'FLAHERTY: Peta Durham who is the -- I think one of the lead modellers.  
30

THE COMMISSIONER: Yes, and was involved I think in face-to-face dealings  
with your committee.

MR PETERS: Yes, quite often.  
35

THE COMMISSIONER: I think you referred to her in the study. Is that correct? In  
your statement. Yes.

MR PETERS: Yes. I did somewhere, yes.  
40

MR O'FLAHERTY: Yes. That was -- paragraph 23, there's a reference to...

THE COMMISSIONER: Thank you.  
45

MR O'FLAHERTY: Yes, and so that's – that document, and I can indicate, Commissioner that Mr Wise has informed me that Mr Fessey has consented to this being part of the Commission's consideration.

5 THE COMMISSIONER: Thank you. You're tendering this, are you?

MR O'FLAHERTY: So I might as well tender that now. This is a document entitled 'Questions from Edward Fessey'.

10 THE COMMISSIONER: It needs to be understood that these are questions sent by email by Mr Fessey to Peta Durham of the MDBA on what date?

MR O'FLAHERTY: That's as yet unclear. I think Mr Wise can narrow it down to a year, but we're not quite sure exactly when that email was sent, but - - -

15

THE COMMISSIONER: Which year?

MR O'FLAHERTY: 2016, but we can probably make some further inquiries with Mr Fessey and/or Mr Wise on that front. The first answer to the question is what we've just been discussing, the consideration of the Barwon-Darling Plan in 2012, and the second paragraph of the answer talks about the model used, states:

20

*The model used for the Northern Basin Review was unchanged from the Basin Plan development version. This model represents 2007/2008 level of development and incorporates ..... accounting rules in July 2007.*

25

That's essentially where you say that it's – the MDBA is stating, no, we have not updated the modelling to the 2012 Plan.

30 MR PETERS: Absolutely.

MR O'FLAHERTY: They go on to say – this is in the fourth paragraph of that answer – a statement to the effect that the model does not include the embargo on diversions of class B and C licences and doesn't take into account the 300 per cent limit in any water year. Do you understand that to be the only things that the model doesn't take into account?

35

MR PETERS: Well, there was a change to the pump size. The original pump size was six inch, and the – and I'm going on memory. I remember going out and having a look at the pumps used on C class pumps, and I think they were 28 inch. I can remember them telling me – because they were used on the – when there was a major flood in the river. They can nearly – there were about 14 or 15 of them. They can nearly turn the river backwards. They were massive. So now they – it's possible to now use those one way flow so they suck the river completely dry.

45

MR O'FLAHERTY: So there was the issue that the 2012 changes incorporated pump sizes, and was there also the changes in the heights at which pumping could occur as well?

5 MR PETERS: That's the A – that's the B and C class. My understanding is that – I mean, a C class licence is overbank. The B class is about half full. There had been no precedent, as I understand, for revision of those licences on a one-to-one basis. But that change was made that Cs and Bs could all be converted to As on a one to  
10 in mind very importantly that all that stuff was not – when the Barwon-Darling Water Sharing Plan was discussed, there was a great deal of public consultation that occurred with the 2012 Barwon-Darling Water Sharing Plan, and then it was put on public exhibition. None of that stuff was in it. Nothing was in any of those issues. It went into the Minister's office and then magically came out with those.

15

MR O'FLAHERTY: Yes.

THE COMMISSIONER: Can I just get the timing right? The changes to the Barwon-Darling Plan that Mr Fessey was inquiring about, that is, as to whether they  
20 had been taken account of in the modelling for the Northern Basin Review – they dated from 2012?

MR PETERS: Correct. Yes.

25 THE COMMISSIONER: And the Northern Basin Review wasn't concluded until 2016?

MR PETERS: That's correct.

30 THE COMMISSIONER: In Ms Durham's reply to Mr Fessey – that's the italic, I think, Mr O'Flaherty, isn't it?

MR O'FLAHERTY: That's right, yes. That's my understanding.

35 THE COMMISSIONER: I may be wrong, but the whole of the substance of her answer to the first question is to set out a verbatim quote from the Northern Basin Review itself.

40 MR O'FLAHERTY: That quote, Commissioner is from the report I referred to - - -

THE COMMISSIONER: Yes.

45 MR O'FLAHERTY: - - - at the start. That's the hydrological modelling for the Northern Basin Review.

THE COMMISSIONER: She presumably knew that Mr Fessey had already read that.

MR O'FLAHERTY: That would seem to be – because this is – that report is dated January 2016.

THE COMMISSIONER: Quite.

5

MR O'FLAHERTY: This appears to be an enquiry following.

THE COMMISSIONER: Quite so. What I'm doubting, in other words, is the good faith of the person preparing this response. The question was:

10

*Can you clarify what Barwon-Darling model has been included in the Northern Basin Review, what considerations if any have been made to the modelling in light of the Minister's changes to the Barwon-Darling Plan in 2012.*

15 Now, I might be wrong, Mr Peters, but I think all that follows – and I think this picks up your remark about language of public servants, all that follows amounts to - - -

MR PETERS: Gobbledegook.

20 THE COMMISSIONER: The model is pre-2012 and no considerations have been made to the 2012 changes.

MR PETERS: That was our frustration. I mean, it's just rubbish.

25 THE COMMISSIONER: Well, understandably, as well as quite offensive, I would have thought. So what that means is that if you then unpick what Mr Peters has fairly called the gobbledegook, in the last of the quoted paragraphs, the community consultation – which includes, I think, Mr Peters' committee – having emphasised the importance of low flows, the MDBA reports of its own work that it suggests that  
30 rule changes in recent years may have reduced protection of low flows.

MR O'FLAHERTY: Yes.

35 THE COMMISSIONER: But that this reduction will not be reflected in the Northern Basin Review modelling results. In other words, what they say is suggested. I think everybody else in all the material before me says that's not a suggestion, it's a fact. But in any event what is suggested, they accept was not taken account of by their own modelling. If you go back two paragraphs. I think we seem to find an explanation, at least in part, I'm not saying a good one, an offered one for  
40 that, namely that:

*New South Wales has recently finalised an updated modelling. It was available relatively late in the Northern Basin Review process, not sufficient time to incorporate the model in the framework –*

45

etcetera.

MR O'FLAHERTY: Well - - -

THE COMMISSIONER: Mr Peters, do you know when the New South Wales so-called recent finalisation of New South Wales' updated model had occurred?

5

MR PETERS: Very – very late. I don't even know whether it actually came in. New South Wales were really struggling to get their models done. I mean, there's a whole series of models that all had to be reviewed that have to go into the - - -

10 THE COMMISSIONER: When you say "struggling", you mean New South Wales is a poor State, it can't afford enough public servants to do it.

MR PETERS: Well, the – a bit of history in the water of New South Wales. When – when David Harriss left there was a major stripping of all the intellect of the  
15 department.

THE COMMISSIONER: Well, that's what I mean, a poverty stricken jurisdiction that can't afford public servants.

20 MR PETERS: Absolutely.

THE COMMISSIONER: Right. So what that comes down to, the gobbledegook translates to this, doesn't it?

25 MR PETERS: Yes.

THE COMMISSIONER: That knowing that they model in order to take account of conditions, actual and hypothesised – a comparison, that's why you're modelling – and knowing that the actual conditions had changed from the assumptions that they  
30 were using, they took no steps for several years to improve the model?

MR PETERS: Exactly right. It - - -

THE COMMISSIONER: And then claimed that in aid as a justification for not  
35 improving the model?

MR PETERS: Yes.

THE COMMISSIONER: So we have not improved the model because we have not  
40 improved the model.

MR PETERS: It's good logic, isn't it?

THE COMMISSIONER: Well, it's a truism but it's a very offensive answer to give  
45 to a serious gentleman like Mr Fessey.

MR PETERS: And he was very offended, I can assure you.

THE COMMISSIONER: As he should have been.

MR PETERS: One of the issues, Commissioner, that's very important to – and it was a fundamental problem with the 2007 Water Act is that the states were sort of  
5 brought kicking and dragging. New South Wales – and we had this feedback from the irrigators – thought that the MDBA were a mob of incompetent people in terms of what they were doing and they just dragged their heels all the way through. On the issue which will no doubt come out in a moment about compliance, I'd, when I made presentations to the MDBA board, go crook at them about why the hell aren't  
10 you pulling this on but they were very hesitant to pull on New South Wales. The reality was that they could not implement the Plan without New South Wales being a willing participant so they did not want to offend them. And I found this is another case of not wanting to offend New South Wales.

15 THE COMMISSIONER: Why would you offend New South Wales by taking account in your model of what New South Wales had administratively done?

MR PETERS: I should know the answer to that. I do know the answer and it won't bloody come to me.  
20

THE COMMISSIONER: You see my point. If New South Wales was the polity that had administratively made these changes, why would it offend New South Wales to take account of that reality?

25 MR PETERS: Well, as I recall – as I recall the ICAC investigation which has still not come out, there are very serious questions - - -

THE COMMISSIONER: Well, make sure you don't tell me anything that ICAC would prefer you not talk about.  
30

MR PETERS: Perhaps I don't go any more then.

THE COMMISSIONER: I wish to preserve, to the greatest extent possible, the integrity of ICAC's investigations.  
35

MR PETERS: All right. Well, I will shut up.

THE COMMISSIONER: I'm not asking you to shut up. I just want you to keep that in mind, that's all, please. Thanks.  
40

MR O'FLAHERTY: I just would like to point out, Commissioner, as you know, that the stated purpose of the Northern Basin Review in their own report was as a result of recognition about the knowledge and the specific requirements of the Northern Basin Review could be improved.  
45

THE COMMISSIONER: Yes, that's like the word "suggestion", it's an understatement, isn't it?

MR O'FLAHERTY: I would also point out - - -

MR PETERS: Can I add to that?

5 MR O'FLAHERTY: Certainly.

MR PETERS: That's really important. In the initial stages of the Northern Basin Review, Commissioner, I used to have to say to the – all the staff that used to come to make presentations to NBAC, please don't talk about the southern Basin. The  
10 MDBA had virtually no knowledge and history with the northern Basin so everything they used about it was predicated on what happened in the southern Basin. So the Northern Basin Review is about trying to get a bit of science and understand what was going on in the northern Basin because they quite obviously – the stuff they had was very – very weak.

15 THE COMMISSIONER: Yes.

MR PETERS: So the science that was going to happen had to be – would be the stuff that was relied on. That's why it was so disappointing when it was, you know,  
20 they did all these sorts of things.

THE COMMISSIONER: Yes.

MR O'FLAHERTY: There is also, in my submission, an inaccuracy in the  
25 description in the – of the Water Sharing Plan. It's referred to in that fourth paragraph as an "Interim Water Sharing Plan". My understanding of the 2012 Water Sharing Plan, it was not an Interim Water Sharing Plan, it was a Water Sharing Plan.

MR PETERS: Are you sure? I mean, that's not my job to question that you're  
30 right?

THE COMMISSIONER: Yes, it is.

MR PETERS: Is it?  
35

THE COMMISSIONER: Yes, it is.

MR PETERS: I don't think that's right.

40 MR O'FLAHERTY: Right.

MR PETERS: I've got a horrible feeling it was still an interim plan.

MR O'FLAHERTY: Okay.  
45

MR PETERS: But the techos will answer that.

THE COMMISSIONER: Interim or otherwise, it's binding.

MR O'FLAHERTY: Yes.

5 THE COMMISSIONER: That's the point. Are you about to move off this email?

MR O'FLAHERTY: I don't have any further questions on this one.

10 THE COMMISSIONER: It uses some language that I find useful as an occasion for me to ask you, Mr Peters, about something that I think is important. Do you see Mr Fessey's third question uses the expression "cap is king" and that "the hijinks now possible in the Barwon-Darling", etcetera, etcetera. Could you elaborate for me, explain to me what he's getting at when he says "cap is king"?

15 MR PETERS: Well, the first iteration of water reform in the Barwon – in the Murray-Darling Basin Authority was the cap. So they set the cap. You're aware of that. They set the cap and that created a great deal of angst because a lot of irrigators lost a lot of water and didn't get any compensation. The whole Plan is based around what that cap will be. And I think that's another thing that's starting to become very  
20 concerning, is that the MDBA are making changes that's going to end up changing the cap.

THE COMMISSIONER: When we talk about "cap factors" that includes, doesn't it, the idea of localising the - - -

25

MR PETERS: Back to each valley.

THE COMMISSIONER: The limits.

30 MR PETERS: Yes. And there was a great controversy that we used to get the Namoi and the Macquarie used to get stuck into us because – or into the MDBA because the cap factors in those two valleys were quite problematic, but the MDBA didn't want to touch them because if they modified them, they would have to then modify some in the southern Basin that would have created another problem.

35

THE COMMISSIONER: Just to explain that, so if I'm in the position of a Namoi irrigator and I look, perhaps, a bit enviously at other rivers further south in the Basin and I form a perception that the imposition of the cap for the Namoi represents a greater proportion in reducing from historical usage than, say, somebody is suffering  
40 in the Murrumbidgee. And that's purely hypothetical. I don't know if that's true, but that's the kind of disquiet you're referring to, is that correct?

MR PETERS: Well, I – I – you're into a level of technical that I'm not good enough on. But my understanding is that the way it was calculated with cap factors – and  
45 you need someone who can explain that to you properly – there was an anomaly with Macquarie and Namoi and that disadvantage, the Namoi, not particular irrigators,

from the techo people and – but they couldn't revisit it because if they revisited it, it had major ramifications.

5 THE COMMISSIONER: You would have to balance out because at the end of the day there is one overall cap.

MR PETERS: Exactly.

10 THE COMMISSIONER: So that if you, to put it crudely, were to reduce a cap factor in one valley in order still to meet the requirements of the overall cap you would probably have to increase it somewhere else.

MR PETERS: Absolutely.

15 THE COMMISSIONER: Right.

MR PETERS: But you need somebody with a techo background to give you a good – because it's a bit hard to get your head round it. I've never properly got my head round it 100 per cent.

20 THE COMMISSIONER: But I think as you've explained in your statement and as your committee, I think, raise, the history and operation of these caps and the cap factors is of quite some importance in appreciating the move to the Basin Plan's notion of a sustainable diversion limit.

25 MR PETERS: That's my understanding.

THE COMMISSIONER: There is a relation between them though they're not exactly the same.

30 MR PETERS: Yes. And what I've heard – what I understand is happening now is that there are – there has been a growth in use which is not meant to have occurred and now they're going to have to play with the cap factors again so that may have – but you're in way out of my technical qualities – qualification. But I think there's a big problem there. There's a potential problem to the value of irrigators' waters licences.

THE COMMISSIONER: Yes. You refer that to in your statement. Could you elaborate that to me a bit more?

40 MR PETERS: Well, as I understand it, and please understand I'm not a technical bloke.

THE COMMISSIONER: That's all right.

45 MR PETERS: If the cap factors are changed – I mean, my irrigation licence is mortgaged to the bank - - -

THE COMMISSIONER: Yes.

MR PETERS: - - - with an amount of water. Now, if these cap factors get changed, the value of my asset that I have mortgaged potentially changes as well. So - - -

5

THE COMMISSIONER: It depends on which direction it changes, doesn't it? As to whether the bank is more nervous or less nervous.

MR PETERS: Exactly, but I think it's going to go to the more nervous one.

10

THE COMMISSIONER: I think that's the way of the world, yes.

MR PETERS: Yes.

15

THE COMMISSIONER: That's right. Thanks.

MR O'FLAHERTY: And when was that – what was explained as the – by the MDBA as a reason why they didn't want to revise the cap factors, was that their explanation or - - -

20

MR PETERS: Because they would have to go into the southern Basin. Because they started – they started in the – I mean, the northern Basin was only a very small percentage of the water compared to what's in the southern Basin so if they start revisiting southern caps, you know, it becomes a real problem.

25

MR O'FLAHERTY: Right. A real problem in terms of an economic problem but - - -

MR PETERS: Well, in terms of their overall number.

30

MR O'FLAHERTY: Yes.

MR PETERS: You know, if you change some of those cap factors in the Murrumbidgee and down into the Murray, you're talking huge quantities of water so that opened up - - -

35

THE COMMISSIONER: And a lot more irrigators.

MR PETERS: Absolutely, yes.

40

MR O'FLAHERTY: This is discussed, as the Commissioner noted, in paragraph 17 of your statement. In paragraph 18 you refer to making six presentations to the Board expressing the committee's concerns on a range of subjects, including environmental water. What were some of the other subjects that the concerns were? I take it cap factors was one of them?

45

MR PETERS: It was. Well, it was a full gamut of issues, not in particular importance but compliance. It obviously made no sense to take – to take water from the northern part of the Basin and not protect it as it went down.

5 MR O’FLAHERTY: That’s the issue of environmental water shepherding; is that right?

MR PETERS: Yes. I don’t know whether you’ve got your head around the unregulated water licences.

10

MR O’FLAHERTY: Yes, well, some of us more so than others, but yes.

MR PETERS: Very simply, I’ve got an unregulated licence.

15 MR O’FLAHERTY: Yes.

MR PETERS: So I’m allowed to pump when the - - -

MR O’FLAHERTY: Certain gauges upstream are at a certain level.

20

MR PETERS: Yes. And there has got to be a visual flow into my hole and a visual flow out.

MR O’FLAHERTY: Yes.

25

MR PETERS: So whether it’s environmental water or anything else, well, away I go.

MR O’FLAHERTY: Yes.

30

MR PETERS: So – and, I mean, I don’t have, I’m not above a dam so I don’t have that problem, but that’s the concern. You’ve taken water away from up the top and legally people downstream can pump it out.

35 MR O’FLAHERTY: Yes.

MR PETERS: What the hell would you do that for?

MR O’FLAHERTY: Yes.

40

THE COMMISSIONER: Well, if you were going to engage in what I call overt transfer from one set of producers to another set of producers, you should at least say that’s what you’re doing and see what everyone thinks. That’s what you mean, isn’t it?

45

MR PETERS: I – well, exactly. And don’t forget governments have been very good. I mean, initially when all the development was done up in the... they

transferred all the wealth away from the dryland farmers, which... they all got all that wealth transferred up there. Well, now they're taking water away from the blond blokes and giving it to the fellows down in the Barwon-Darling. So it's very nice of the government, I thought.

5

THE COMMISSIONER: It's the kind of endeavour that you say the Basin Plan does not encompass as an aim, and, therefore, it needs to be questioned.

MR PETERS: Well, it – absolutely. It's just not acceptable in any form.

10

MR O'FLAHERTY: What was – when you were giving these – so that's – there was – those presentations were to the full MDBA Board?

MR PETERS: Yes. And the dinners afterwards with a few bottles of red wine I would tell them what I really thought.

15

MR O'FLAHERTY: Right.

THE COMMISSIONER: That would be Riverland red.

20

MR PETERS: Or...

MR O'FLAHERTY: In terms of the meetings prior to the dinners, what was the response from the Board in relation to those concerns?

25

MR PETERS: Well, on the compliance issue, I remember digging out – I think there were four clauses in the – in the Act that gave the MDBA the power to do something about it.

MR O'FLAHERTY: This is in the water – Commonwealth Water Act?

30

MR PETERS: Yes.

MR O'FLAHERTY: Yes.

35

MR PETERS: Was it in that, or in the MBDA? One of them, anyway. I can check that out. I can't - - -

THE COMMISSIONER: That's all right. We've got... Act.

40

MR PETERS: So they had the capacity to do something about it, and they didn't want to do anything, and I think that was part of stepping on New South Wales and probably Queensland's toes.

MR O'FLAHERTY: So what acts – so just so we're clear, what aspect of compliance did you say that the MDBA could act on, but weren't?

45

MR PETERS: Well, they could step into the process of compliance.

THE COMMISSIONER: They could obtain – they can – they’ve got a compulsory power to obtain information.

5

MR PETERS: Yes.

MR O’FLAHERTY: There’s - - -

10 MR PETERS: They didn’t want to - - -

MR O’FLAHERTY: There are broader enforcement powers under the Act, I think.

15 MR PETERS: Prior to pump, they did not want to touch it. It was not something they wanted to look at.

MR O’FLAHERTY: No.

20 MR PETERS: And I drummed them at the Board level numerous times about it.

THE COMMISSIONER: Did they ever explain, I assume, Mr O’Flaherty, we’re talking about some other powers in part 10 of the Act.

25 MR PETERS: Well, they used to always say that in - - -

MR O’FLAHERTY: I was going to do part A.

MR PETERS: Their powers don’t become – are not triggered until 2019.

30 THE COMMISSIONER: And that’s in large measure correct.

MR O’FLAHERTY: Yes.

35 THE COMMISSIONER: Did they – the people with whom you were speaking about this topic, did they take a position concerning any belief by them or suspicion by them that illegal conduct was taking place?

MR PETERS: I think that was generally known.

40 THE COMMISSIONER: So you were putting the proposition that lots of people were fearful that was so.

45 MR PETERS: Well, the concern was – and I must preface this statement with the fact that I’m an irrigator and the greater majority and I mean 98 per cent of irrigators would never – are dead set honest, but there are a few that aren’t. And the bigger ones tended to be the ones who were doing the wrong thing, and, you know, there are

particular occasions, and I think there are cases in the courts at the moment, where I think it was – it was known or it was suspected that that sort of stuff was going on.

5 THE COMMISSIONER: Now, did the MDBA take a position – in these conversations that you are recalling, did anyone from the MDBA express a view as to whether this was something worth investigating, worth looking at, or did you - - -

MR PETERS: Terribly important, but not our... it was a state issue.

10 THE COMMISSIONER: Along the lines of take it up with the state.

MR PETERS: We will fix it in 2019.

15 THE COMMISSIONER: I see. Yes.

MR O'FLAHERTY: With the compliance issue, was there concerns relating to Water Resource Plans and their – and their formulation, or was it more the on the ground compliance the committee was more concerned about?

20 MR PETERS: Well, on the ground. When the committee was going, all the plans had to be redone, and I don't think they had – they might have had one in or something. And New South Wales wasn't going to have to capacity to do it, and I remember the MDBA talked about they were going to use MDBA staff to help New South Wales get their plans done.

25 MR O'FLAHERTY: You say in paragraph 19 you developed the impression that the MDBA wanted to use the committee as a tool to justify their actions. I've read that to mean as a – essentially a ticker box approach to, "We've consulted with the community". Is that a fair paraphrasing of what you're saying there?

30 MR PETERS: No. That was the way I was starting to feel, yes.

35 MR O'FLAHERTY: Was there a combination of the – your interactions that that – developed that impression or was there any particular features that you had wanted to draw our attention to.

MR PETERS: Look, I can't remember them, but - - -

40 MR O'FLAHERTY: Sure.

MR PETERS: I mean, it was an overall impression that I ended up with.

45 THE COMMISSIONER: Can I ask you in relation to that, paragraph 28 of your statement attributes to the MDBA through no doubt the officers you were speaking to largely disregarding concerns about protecting environmental flows. Now, in particular, does that refer to the notion of a planned environmental pulse or release being unprotected in the sense that down it goes off downstream where it can

lawfully be used for consumptive use by another irrigator? Is that what you're referring to?

MR PETERS: No. No. No.

5

THE COMMISSIONER: What do you mean by "protecting environmental flows"?

MR PETERS: Well, they – it was an issue they didn't want to address. I mean, the  
- - -

10

THE COMMISSIONER: When you say "protecting", you mean protecting from downstream consumption.

MR PETERS: Well, making sure that if we took 100 gigalitres of water from here  
15 that it would go down to somewhere we wanted it.

THE COMMISSIONER: For environmental purposes.

MR PETERS: Absolutely.

20

THE COMMISSIONER: Not for some other farmer's irrigation.

MR PETERS: No. Well, that's – it was purchased from the public funds.

25 THE COMMISSIONER: Okay. Right. Now, this recollection you have is that the MDBA officers said something to the effect of, "It's okay because over 114 year average, things will work out". Did you understand that to be their response to a concern about environmental water being used consumptively downstream after release?

30

MR PETERS: Mr – Mr Wise will – will have the better detail on it, I think. I - - -

THE COMMISSIONER: I'm just wondering how does doing anything over 114  
35 year average, how does that answer a concern that environmental water is being consumed downstream, not for the environment? I'm wondering if you can recall, to explain what you think their approach was being - - -

MR PETERS: Well, everything – everything in the way that they approached – I  
40 mean, when – when Mr Wise did his work and pointed out, you know, by the reading gauges and using what the changes to the 2012 Water Sharing Plan were – Barwon-Darling Water Sharing Plan was and identified the one in three years the Barwon-Darling would not have water, their response all the time was, "It's okay because over 114 years it will – it will average out, and it will be okay".

45 THE COMMISSIONER: I'm not sure. When I first heard those kind of statements, I thought I understood what they meant, but I realise on reflection I don't really. What does it mean?

MR PETERS: Well, if you look at over the 114 years of flows, there are – don't hold me exactly to it, but there are about five years where there were just huge massive amounts of water went down. So that is counted as – I mean, that water ended up going out to – you might have even got some of that.

5

THE COMMISSIONER: Well, I – I'm afraid maybe I do understand it. That is, you mean if you average out historically high flows and historically low flows and those in the middle, you end up with some fictitious mean which means the river is neither ever in huge flood or ever dry.

10

MR PETERS: And everything will be all right.

THE COMMISSIONER: Well, what I'm quite taken aback by that, if that be true, that seems to be both wrong and fatuous, but more of the point, it seems to be contrary to what the MDBA and its published science and many other experts have said is very important to bear in mind that this is a Basin whose river system is inherently, intrinsically and characteristically variable, and the variability is essential to its environmental health.

15

20 MR PETERS: Yes.

THE COMMISSIONER: So it would seem odd if you're interested in the environmental health of the system that you would be complacent about threatened increases in the number and severity of dry times by saying it evens out because there will be some floods from time to time.

25

MR PETERS: Well, I can assure you that that was put to me many, many times, our committee many, many times.

30 THE COMMISSIONER: That seems to be an extremely serious departure from their own scientific tenets.

MR PETERS: Well, Mr Wise will no doubt tell you a moment, that after he did his work – I mean, I think, as I recall, he was poo-pooed because he wanted to get some statistical analysis done because he said the modelling is not real good, and I thought he was crazy when he brought that up until I started to listen to what he was talking about, and they didn't want a bar of it, but, I mean, he will give you that chapter and verse.

35

40 THE COMMISSIONER: Thank you.

MR O'FLAHERTY: You talk about the concerns about your – the modelling both in the statement and your submission to the Northern Basin Review and the fact that in paragraph 13, you say that you were never allowed access to the final model run. I just wanted to clarify something in that. So I understand you – the committee may have been given at least one report that described the hydrological modelling but

45

there wasn't any detail about what that modelling entailed and didn't give an ability to assess the model itself, if that's what the committee wanted to do.

MR PETERS: That's correct.

5

MR O'FLAHERTY: Because this – I just wanted to clarify.

MR PETERS: Keep in mind I had some people on the committee that had a pretty good handle on that stuff.

10

MR O'FLAHERTY: Yes. In response to your submission to the Northern Basin Review – this is in paragraph 43 of your statement, you refer to the fact that there was a – there was, in fact, a written response in response to your submission published as a media release. Was that provided to you prior to their publishing that new release?

15

MR PETERS: No, not that I recall. I thought it was a really interesting thing that they did it.

20

MR O'FLAHERTY: Yes, they didn't give you prior notice that they were doing that?

MR PETERS: No. I don't think they did it for anyone else either.

25

MR O'FLAHERTY: Have the – have you discussed that with the MDBA?

MR PETERS: No, no, I haven't spoken to the MDBA for 12 months or more.

30

MR O'FLAHERTY: That response should be behind tab 3 of the folder, and I just wanted to clarify one thing, and it's touching upon the, what reports were provided and not provided. On the last page of that, on page 4, this is in their table of claim and response. The last row talks of the claim being the Northern Basin Advisory Committee did not get hydrological reports ever and the response is:

35

*The two versions of the hydrological report summary and detailed released to the general public upon completion, November 2016 and February 2017 respectively.*

40

And then it goes on to say that the February 2017 report was not provided. Do I take it that you were – the only hydrological modelling report that was provided to the committee was the summary report in November 2016?

MR PETERS: That's my recollection. We – we pressed them to get access to their – the guy that was doing their review...

45

MR O'FLAHERTY: Yes.

MR PETERS: And we were given the opportunity to talk with him, but, once again, we were – it was at a very high level, and the people on my committee that wanted more detail were once again not given it.

5 MR O’FLAHERTY: And then there’s a detailed report which talks about it being released to the general public in February 2017. Now, I – have you – have you ever seen that detailed report yourself? I know that was - - -

MR PETERS: No, I haven’t.

10

MR O’FLAHERTY: Okay.

MR PETERS: I’m too busy trying to make a quid on the farm.

15 MR O’FLAHERTY: Fair enough. The summary report, of course, was apparently released to the general public in November 2016. That postdates the advisory committee’s report in October 2016 so it’s fair to say that you weren’t able to take into account that report in providing the committee’s report.

20 MR PETERS: And didn’t I see somewhere in an EDO FOI that the irrigators were given a detailed report?

MR O’FLAHERTY: Yes, you refer to, in your submission, that – this is on page 3 and the tab behind that, that you’ve reviewed documents that were released under  
25 FOI that details were given to the Northern Irrigators’ Alliance in July 2016.

MR PETERS: Well, my concern – my concern was that Bewsher was doing the review for the – they were treated as the peer review for the MDBA work.

30 MR O’FLAHERTY: Yes.

MR PETERS: Bewsher had done a considerable amount of work for the MDBA so there would be a potential question of independence and Barma which was doing the Northern Basin Irrigators’ work had also done an extensive amount of work for the  
35 Murray-Darling Basin Authority.

MR O’FLAHERTY: Yes.

MR PETERS: So once again, you know, where are the Chinese walls and all that?  
40

MR O’FLAHERTY: Yes. Now, you said the committee was trying to get access to Mr Bewsher to discuss his work?

MR PETERS: We wanted to understand – particularly a couple of people on the  
45 committee wanted to understand the assumptions and a bit of detail about, you know, that they could have a level of confidence in the modelling.

MR O'FLAHERTY: Yes, and were you – was the committee able to discuss with Mr Bewsher that? Was a meeting set up?

5 MR PETERS: We were given a – exactly the same stuff we were getting from the MDBA.

MR O'FLAHERTY: So there wasn't any detailed - - -

10 MR PETERS: No.

MR O'FLAHERTY: - - - interaction with Mr Bewsher.

15 MR PETERS: No, I recall leaving that meeting very frustrated. We had not gained anything.

MR O'FLAHERTY: So that was a meeting that you had – one of the meetings that the committee had with the MDBA and their modellers.

20 MR PETERS: It wasn't all the committee, just I think the people that were interested in the modelling aspect of it.

MR O'FLAHERTY: Right. And did Mr Bewsher attend that meeting?

25 MR PETERS: Yes, he did. Yes.

MR O'FLAHERTY: You said... you weren't satisfied with the result of that.

30 MR PETERS: Well, I had the feeling and it was only a feeling, he had been given writing instructions to go through the motions and tell us nothing.

MR O'FLAHERTY: You got the impression he wasn't free to speak?

MR PETERS: No. That's what I wanted to say, yes.

35 MR O'FLAHERTY: The – the – and I will clarify this, Commissioner, once I get to tendering these reports, but the report that I've had regard to in terms of the hydrological modelling report, could it be described as a detailed report being 200-odd pages is, in fact, dated January 2016.

40 THE COMMISSIONER: Right.

MR O'FLAHERTY: That would appear to be the one that was released upon – released to the general public in February 2017, but I would like to clarify that.

45 THE COMMISSIONER: More than 12 months later.

MR O'FLAHERTY: Yes. I've also seen a 30-page report which is described as a summary report which is later, in 2016, but was apparently released before the detailed report so I just – that discrepancy I would like to clarify.

5 THE COMMISSIONER: For sure.

MR O'FLAHERTY: Before we tender those.

THE COMMISSIONER: Thank you.

10

MR O'FLAHERTY: The only – the other – one last topic I just wanted to discuss with you, Mr Peters, is your – in your submission to the Northern Basin Review you talk about New South Wales Government's intention to protect environmental water. You make a statement that:

15

*MDBA is aware that New South Wales has no intention to implement either the protection of environmental water by them or the coordination of the environmental flows.*

20 I just wanted to unpick that a bit.

MR PETERS: Sure.

25 MR O'FLAHERTY: How did you become aware of New South Wales' lack of intention?

MR PETERS: Well, we were getting feedback from our irrigator members.

30 MR O'FLAHERTY: Yes.

MR PETERS: Who were talking to the New South Wales Department. The – Queensland always attended all our NBAC meetings. They were there quite – New South Wales - - -

35 MR O'FLAHERTY: The Queensland Government?

MR O'FLAHERTY: Yes. Always. Their water department always were there all the time. The New South Wales Government treated the whole thing with disdain but we were getting the feedback from the irrigators about what was happening. I didn't – I mean, subsequently, you know, when we learned from the – from the – I can't remember which Commission it was now but when the head of New South Wales Water had had the discussion with the irrigators, we then learned how good the contact was with the irrigators with New South Wales Government so what we were being told was probably right. That all make sense?

45

MR O'FLAHERTY: Yes. You got the impression that the New South Wales Government had a very close relationship with certain irrigators and were making policy decisions consistent with their wishes.

5 MR PETERS: Absolutely.

THE COMMISSIONER: There were irrigators on your committee, weren't there?

MR PETERS: Yes.

10

THE COMMISSIONER: And you're an irrigator but, I mean, there were representatives of major irrigator - - -

MR PETERS: Absolutely.

15

THE COMMISSIONER: Do you – it's one of those you recall of coming up with this idea that came to be called the toolkit measure.

MR PETERS: Yes, it came out of their – that was one of their concepts.

20

THE COMMISSIONER: Who was that person or those persons?

MR PETERS: The guy from the St George area – where's my little picture?

25 MR O'FLAHERTY: Was that Mr Todd or - - -

MR PETERS: ... where is my little picture of the committee?

30 MR O'FLAHERTY: That should be behind tab 4 of your folder on page 5. We've got the - - -

MR PETERS: It looks like Long Bay inmates, doesn't it? Ian Todd.

35 THE COMMISSIONER: And Ian's – Ian Todd's affiliation was with which body then?

MR PETERS: He's a Condamine-Balonne irrigator.

40 THE COMMISSIONER: Thank you. And the actual expression "toolkit" came from your discussions, did it?

45 MR PETERS: Well, one of the things that became quite obvious – and I think it followed – it followed from how successful they were in getting their environmental targets but it looked as though it wasn't going to happen. So the only way it was going to happen was if you could make all these things join up.

THE COMMISSIONER: Yes.

MR PETERS: The river systems.

MR O'FLAHERTY: Yes.

5 MR PETERS: Now that, as I understand it, from the river operators – keeping in  
mind that in the northern part of the Basin that's the states as unlike in the south  
where the Murray-Darling Basin Authority themselves do it – talking to them,  
because one of the guys that did my secretariat for the NBAC, Frank Walker he came  
10 out of that, out of the Queensland department and he said that can't be done, it's not  
possible as a river irrigator to be able to join up all the things to make it happen.

THE COMMISSIONER: And is that partly what lies behind what is in your  
committee's report at page 12, down the bottom of that page:

15 *The Northern Basin Review research project showed conclusively that the  
objectives of the Basin Plan cannot be met solely by setting SDLs –*

That is, sustainable diversion limits –

20 *there is not enough water to meet the northern Basin's environmental and  
cultural water needs without major adverse social and economic impacts on its  
people.*

Etcetera, etcetera:

25

*Rules and patterns of extraction make it hard to achieve some environmental  
targets no matter how water is recovered –*

Etcetera, etcetera. Is that related to the same concerns?

30

MR PETERS: Yes.

THE COMMISSIONER: Well, now – so there's connectivity in hydrological terms  
involved plus there is simply what I might call the historic over-allocation and the  
35 disruption that is threatened by reversing it. That was what you were facing on your  
committee?

MR PETERS: Yes, the – the reason I'm hesitating is that recently there was a flow,  
a real time flow event where they coordinated – and I don't know whether that was  
40 done before this – where they had coordinated water out of two different river  
systems to go down the Barwon-Darling. Now, prior to it - - -

THE COMMISSIONER: That was later.

45 MR PETERS: I didn't - - -

THE COMMISSIONER: That was later.

MR PETERS: I didn't – I mean, they couldn't make that happen but all of a sudden they have so I don't know.

THE COMMISSIONER: I take your point. I take your point.

5

MR O'FLAHERTY: I could be a bit out of date.

THE COMMISSIONER: Yes, the impossible seems to have been found possible.

10 MR PETERS: Yes, because the history of that was that one of the Ministers, New South Wales Ministers had a brilliant flash when the blue-green algae occurred in the Barwon-Darling and I remember he let 35 gigalitres out of the Pindari Dam up near home which is a million miles away from the – where the blue-green algae is and it journeyed merrily down the stream and got to about 20 per cent down the river and it  
15 all disappeared. So all of a sudden now we can do it when it couldn't happen then, so I can't, I mean, that's all anecdotal stuff so it's not much use to you.

THE COMMISSIONER: So I should think of the toolkit as it was devised by your committee and its work as it's one of the areas that shows the desirability of what  
20 you call adaptive management; is that right?

MR PETERS: That's correct, yes.

THE COMMISSIONER: And it's in particular one of the areas where localism is  
25 extremely important.

MR PETERS: Absolutely.

THE COMMISSIONER: And that gave rise to something which is unfortunately  
30 called TIC; that is Toolkit Implementation Committee.

MR PETERS: There were a lot of initiatives.

THE COMMISSIONER: Did that ever happen, did TICs come into existence?  
35

MR PETERS: No. No, none of that.

THE COMMISSIONER: Were you ever told why they were not?

40 MR PETERS: Well, the MDBA initially were pretty lukewarm to the whole concept.

THE COMMISSIONER: Of toolkit or TICs?

45 MR PETERS: Of the toolkit. But I then noticed subsequently it started to become the panacea to all their problems.

THE COMMISSIONER: Yes.

MR PETERS: So they sort of picked it up as a - - -

5 THE COMMISSIONER: What you said in your report is you really have to have toolkit implementation committees for a number of reasons, including localism and adaptive management.

10 MR PETERS: Absolutely. I will give you a good example. Up in this Condamine-Balonne they had used an irrigator's dam, keeping in mind these irrigator's dams are huge, they had released some water from there to get an environmental outcome down in the – some of the environmental targets downstream, so they had actually done it. So there is a capacity with a bit of, you know – I mean, the irrigators will work constructively with the government if the government is fair dinkum.

15 THE COMMISSIONER: Particularly if there can be purchases.

MR PETERS: Well, not necessarily, though. I mean - - -

20 THE COMMISSIONER: Your committee report refers to the possibility of - - -

MR PETERS: That is a - - -

25 THE COMMISSIONER: - - - ..... market purchases by the .....

MR PETERS: Yes, there is an opportunity for that. But I mean, you've got to remember the irrigators need goodwill. I mean, the cotton growers have got some pretty negative PR about – and I think everyone wants – you know, I mean, all the farmers want to have good PR.

30 THE COMMISSIONER: This is referring to what people in other industries call social licence. Is that right?

35 MR PETERS: That's exactly the one. Yes. It's a critical component and farmers are very keen to participate in that.

THE COMMISSIONER: Yes.

40 MR PETERS: I mean, I've struck that in a whole range of other areas so, but the top-down – the top-down approach from Canberra or Sydney doesn't work. You need to have a local group that's working, and not Mickey Mouse stuff that's not - - -

45 THE COMMISSIONER: Which is why – I can understand why you – why you say all of this, which is why I'm interested in, can you recall anyone from the MDBA ever engaging with you to explain why that recommendation would not be taken up?

MR PETERS: No. See, when our report came out – I mean, it wasn't there. You've got the timelines, when did their report come out? October 2016.

5 MR O'FLAHERTY: And the Northern Basin Review report itself is dated just November 2016.

MR PETERS: There's the answer.

10 MR O'FLAHERTY: So there wasn't a lot of lead-in time. It's fair to say - - -

MR PETERS: So our reports hits the deck and then the Northern Basin Review comes out. They had it pretty well written. So there was – I mean, they paid a bit of lip-service to it and ignored it.

15 MR O'FLAHERTY: But the concept of toolkit, I take it, was discussed at committee meetings where the MDBA was present throughout that year.

THE COMMISSIONER: Because it was taken up in the Northern Basin Review.

20 MR O'FLAHERTY: Yes, so it was the subject of discussion before the committee produced its report in October.

MR PETERS: Yes. There was a lot of work went into establishing it.

25 MR O'FLAHERTY: Yes.

MR PETERS: I mean, it has got some really good positive components to it.

30 MR O'FLAHERTY: And you explain that initially, the MDBA were very receptive to the toolkit, but then embraced at least parts of it that they liked. Just covering off in terms of the implementation of the protection of environmental flows, we've talked about New South Wales, your awareness of New South Wales' intentions. You make the point that MDBA itself was aware of that. How was the MDBA aware of that? Is that something you told them in committee meetings or - - -

35

MR PETERS: Just rephrase that.

40 MR O'FLAHERTY: Sorry. I took you a little bit earlier just prior to this discussion to your statement that the MDBA is aware that New South Wales has no intention to implement either the protection of environmental flow by them or the coordination of environmental flows. Just as we discussed how you were aware of New South Wales' intentions, I just wanted to explore how you say the MDBA itself was aware of those intentions.

45 MR PETERS: Well, they used to have meetings with – they had a Basin Officials Committee, and I think those discussions took place at that level. I'm... sure it was pretty well understood what was going on. I mean, there was a lot of frustration

from the MDBA about New South Wales's approach. I mean, we haven't touched off on Queensland on a lot of their stuff either. I mean, their compliance and whatever is – is non-existence as well but that doesn't...

5 MR O'FLAHERTY: So in terms of the concerns you are raising in your presentation to the Board, they were not New South Wales specific?

MR PETERS: No.

10 MR O'FLAHERTY: There were concerns across the Northern Basin, Queensland and New South Wales.

MR PETERS: Absolutely.

15 MR O'FLAHERTY: Yes. Was – you said that the Queensland Government officials attended those meetings fairly regularly. Was there any response or feedback given when concerns were raised that affected Queensland's actions?

MR PETERS: Well, Queensland's a different place and very special. So – so – and  
20 they were the Johnny-come-latelies to the development title, and I think their attitude was, "Well, we haven't fully developed everything and we're going to get in and go like hell to get it developed".

MR O'FLAHERTY: Right.  
25

MR PETERS: And I think there was a bit of a – I mean, this is my opinion which may be wrong. There's a maverick approach with anything in Queensland. We get in and go like hell, and we beg forgiveness later. But there were reports of – quite specific reports of theft and I think – did they pick that up in the data cube up in  
30 Queensland? No, that was a New South Wales one, but there were issues there that didn't – that nobody seemed to be looking at and the Queensland Government weren't interested in.

MR O'FLAHERTY: Right.  
35

MR PETERS: And I hope you're going to ask me about the Goondiwindi.

MR O'FLAHERTY: Well, I was going to open the floor to you, Mr Peters, and you've now prompted me to ask that. You state, so I take it – this is in paragraph 47  
40 of your statement. This is some work you've done after your involvement in the advisory committee. You've – you did some work with the Lamey family. What was your role, and how did you help?

MR PETERS: Well, a very good friend of mine contacted me about the anxiety that  
45 that family were going through. They had approached every Queensland official and every federal official and could get no – they were getting no satisfaction yet their property was inundated on two occasions or three occasions, and looking at what

happened, sort of defied belief. The irrigator concerned had walled off 52 kilometres of a valley completely, and then the Goondiwindi Shire Council that was the consenting authority had retrospectively said yep, she's right, away we go. I mean, it didn't make sense. There were irrigators downstream that had been deprived of water.

MR O'FLAHERTY: Yes.

MR PETERS: There were two areas.

MR O'FLAHERTY: Whilst the others are getting flooded.

MR PETERS: The other two were getting flooded. So, I mean, quite clearly, there was a major problem, and I don't think – he has made presentations here. I think I – I don't think it still received any – an exchange.

MR O'FLAHERTY: Yes, and Mr Lamey has certainly been in contact with this Commission. In terms of your interaction, were you trying to talk to Queensland Government officials and Commonwealth officials on these...

MR PETERS: He just asked me "What can I do?"

MR O'FLAHERTY: Yes, and did you have discussions with – I think you referred to the Goondiwindi Council providing retrospective approval.

MR PETERS: No, I didn't get actively involved.

MR O'FLAHERTY: Right. Okay.

MR PETERS: I just directed him about some places he might like to go to activate a bit of interest.

MR O'FLAHERTY: Yes, and your understanding is that there hasn't been much progress in addressing Mr Lamey's concerns.

MR PETERS: Well, as I understand it, there are – I don't think I will get into trouble, there are pending legal actions that have been 12 months old. So you sort of wonder what's happening there.

MR O'FLAHERTY: Mr Peters, that covers off the questions I had. We've – I haven't asked you about everything in your statement and submission. That doesn't mean I don't think it's important. It's just – from my point of view, speaks for itself, but was there any particular issues that you wanted to raise this morning or any – any things you wanted to direct the Commissioner's attention to?

MR PETERS: Well, it seems to me, I mean – the Commission is extremely important, and it was extremely disappointing that the Federal Government took the

attitude that they took, and then this High Court thing just completely baffles me, but, quite clearly, the MDBA is not a scientific body, and it is captured by politics. So I would hope that the Commission can get reform of the Authority when you can't – I don't think you can blow it up. There's – so much work has gone on, but I think if the current approach is continued, the Basin Plan will never be delivered. I'm quite confident of that. So there needs to be a major reform of the Murray-Darling Basin Authority to make sure that it goes back to being a science-based organisation, and that means a major change of senior personnel.

10 MR O'FLAHERTY: When you say it goes back to being a science-based organisation, was there a period of time in which you had confidence that it was?

MR PETERS: Yes, I did. When Rhondda Dickson was the CEO and Craig Knowles was there, they were approaching it on a fair dinkum basis. I thought – when it was about – as I said at the start, it was about a balance. You know, we had difficult – I mean, I know the importance of the production from irrigation, but it is critically important. I'm... Goondiwindi, at the moment, and there have been millions and millions of dollars coming out of there in cotton, and it's a major economic activity, but we started the Basin Plan because we had an impact on our environment. Well, let's bloody well fix it, and the great tragedy is, you know, I've been through two water irrigations and water reform. All we've done is set ourselves up for another one because the Australian public are going to say, you've blown \$13 billion of our bloody money, and the river's worse than what it was. So away we go again. So the irrigators will have to go through – I mean, it creates a major amount of anxiety for irrigators and the communities. If it was done properly, we wouldn't have to do that, and that's what makes me angry. Let's get in and do the thing properly, and we won't have another crack at it.

THE COMMISSIONER: It sounds to me as if you want me in particular to look closely at possible shortcomings in what has happened in relation to community consultation, community involvement, scientific openness. Have I got that correctly?

MR PETERS: Particularly the scientific stuff. I think they've compromised too much and moved away from – and I mean, it's hard stuff. It's not easy, but I think, you know, as I said I watched – I watched the organisation going from being a balanced organisation looking at all the players to – and, you know, I will say it. When Barnaby Joyce was appointed, they went straight off to – towards the irrigators' side of stuff. They appointed – there was – the person that was the Executive Officer of the Macquarie Food & Fibre was appointed to the board. All the discussions up to then were that the 390 in the Northern Basin was going to meet – I never ever heard any conversation about anything less – it was all about 390. And then all of a sudden - - -

THE COMMISSIONER: There's a question whether the 390 was enough, and then as you've written in your statement, lo and behold it ends up at 320.

MR PETERS: Yes, I mean, that was the – to get to the overall 2,750 of the Plan was – I mean, we had people pushing for 4,000. So if we got to 2,750 – if we achieved that, we might have been able to just not have to go through it again. My great fear is, and I will bet bloody a million dollars, we’re going to have to do all this again. If it’s not done properly we will have to go through it all again, the irrigators will cop it all again, and the community will cop it all again, and that’s just stupid.

THE COMMISSIONER: I’ve got this tiny question. In your paragraph 34 of your statement, you refer to the outcomes sought under section B of the Plan. I’m not quite sure I understand that reference. Can you help me Mr O’Flaherty? I think you’re talking about the environmental watering requirements. I think.

MR PETERS: Yes, look, I will have to come back to you on that. I’m not 100 per cent sure.

THE COMMISSIONER: It’s not critical, but if somehow, somebody will work out what that’s a reference to.

MR O’FLAHERTY: Yes, I’m not too sure myself.

THE COMMISSIONER: I can’t find anything which could be fairly - - -

MR PETERS: Someone come back to me and ask me because I will forget otherwise.

THE COMMISSIONER: Don’t you worry. We will chase you.

MR O’FLAHERTY: We’ve got a team to follow that up.

THE COMMISSIONER: Well, now, the next thing I wanted to ask you about, and this is rather more important apropos your last comments about, if I can put it this way, remodelling the MDBA. In your paragraph 42, last sentence, you attribute to Dr Rhondda Dickson, then the CEO, saying something to the effect that it was too difficult for the community to get their heads around the modelling. It would be a waste of time attempting to do so, that is, to share with the community details but particularly critical assumptions that had gone into the modelling to produce various environmental outcomes, etcetera. Was that a one-off, or was that something that was said more than once?

MR PETERS: Well, that’s got a really interesting history, Commissioner. In – I mean, I’ve been involved in quite a number of community consultations of government.

THE COMMISSIONER: Indeed.

MR PETERS: And they are bloody hopeless at it, absolutely hopeless. They go through the motions of doing it and inevitably, you know – and I have the greatest

respect for bureaucracy in Canberra. There's some bloody smart people down there, and they do a very important job. So I don't for one moment speak negatively of them, and I've got a daughter who is one of them up in Brisbane. But unfortunately there is an arrogance, there that the communities are sort of don't get their head  
5 round the complexity of the stuff. Rather than take the approach that we took in the Namoi water study where we worked really hard to try and get the communities across it so they owned it, it tends in Canberra and I have had this, this is not the only example, it's sort of a bit beyond them. So we won't do it. So - - -

10 THE COMMISSIONER: Them, being the community. It's a bit beyond them, the community.

MR PETERS: Yes.

15 THE COMMISSIONER: And "it" being the technical detail modelling.

MR PETERS: Yes. So the consultation, the community consultation never quite works right. It's always lacking a bit. I mean, rather than take them – there's a lot of smart farmers out there, they operate in some pretty tough times, and they're pretty  
20 cluey people. So rather than taking them into your confidence and working through – and it is hard, I did it in the Namoi water study but if you do it they own the outcome. So then all of a sudden your community consultation is successful but the Commonwealth Government is bloody hopeless at it.

25 THE COMMISSIONER: That last was a tentatively advanced generalisation by you. Thank you. Well, now, I did ask you though, was it only the once that you heard her say something like that, or was – are you - - -

MR PETERS: I think that was - - -

30 THE COMMISSIONER: You attribute that to other people as well; is that right?

MR PETERS: Yes, I think I am. I had a great deal of respect for Rhondda. She was – I thought she had her heart in the right place. Yes, it's – yes, I struck it a lot.  
35 You know, poor old dumb bushies that... don't know what day it is, and they get – I mean, they don't overtly – so that comes out of – after a few bottles of red wine usually, but, you know, they're a bit thick. So you don't, you're sort of wasting your time.

40 THE COMMISSIONER: I'm likely, I should say, to report in relation to consultation that it is definitely not reserved for people who are already expert in the technical areas or are, to use the word you've expressed, you've used, smart. In other words, consultation is with the community, and it seems to me that you must be right that trying to narrow it by saying, I will only consult with people who already  
45 understand the specialist expertise or who are what somebody might call smart, that seems to me to be socially a very unfortunate approach and to leave out of the count that social outcomes are legislated as a critical aim of the Plan. I've gathered from

your evidence that you think a very important social outcome is along the lines of what you've just described as buy-in and owning.

MR PETERS: Absolutely.

5

THE COMMISSIONER: By an involvement before rather than after the event of the decision.

MR PETERS: And – and – and you can get – you can get communities to accept lousy deals. People will accept things that aren't – that aren't very good if you do – if you go about it in a – in a proper manner.

10

THE COMMISSIONER: Yes. Well, yes, you're meaning particular people are persuaded that for a general good, some people may have to make some sacrifices.

15

MR PETERS: Absolutely.

THE COMMISSIONER: Mind you, there's something that I have noticed in the number of publications involving you, including the committee report, and that is that if it is for the public good, then it ought to be at public expense, including compensation. That's also, I gather, something that you wish me to take away from your evidence.

20

MR PETERS: Yes.

25

THE COMMISSIONER: Thank you very much. Does that complete the questions?

MR O'FLAHERTY: Just one – you did mention the – your – the current drought and your experience. I just wanted to know whether you had any – anything to share with the Commission about the difficulties faced by the communities as a result of the drought. Was there any aspects of that you wanted to raise?

30

THE COMMISSIONER: In relation to the Basin Plan, that is.

MR O'FLAHERTY: Yes. Yes.

35

MR PETERS: Well, I guess – I guess one of the things that has really struck me with this drought – we've – and I'll relate it to my farm to – to give a context, but we have 140 years of rainfall records and this drought is the worst that's ever happened. There's no precedent to what's going on at the moment.

40

THE COMMISSIONER: That's measured by what, sequence of months without adequate rain?

MR PETERS: In – in – in those critical months that are important. So, I mean, you can't – if you look at annual rainfall it's a bit - - -

45

THE COMMISSIONER: Yes, okay. Yes.

MR PETERS: It's a bit – it's a bit irrelevant.

5 THE COMMISSIONER: Yes.

MR PETERS: So, I mean, on my farm I'm experiencing circumstances I've never struck before. The cost is just horrendous to try and – I mean, I've been – I've been involved in a national drought panel looking at the impacts of drought on farmers and rural communities right across the – the country and I've been around drought policy and I'm, you know – I'm sort of au fait with all of that and fight with my daughter regularly who's in the Queensland Government. So – so I – I think no regard, I don't know whether it's climate change or what but something's happening, something's different, and if you take consideration of what's going on, all the stuff that's being done is going to be completely irrelevant.

THE COMMISSIONER: And how, in your thinking, does that affect the way in which the Basin Plan either was devised or should be implemented?

20 MR PETERS: I need to – I need to sit in my tractor for four hours and I will give you a really good answer to that.

THE COMMISSIONER: Well, feel free to do so. I'm serious. There is a view that I find initially at least attractive, that the Basin Plan was devised expressly – every time we talk about 114 years – was devised expressly to take account of the great variability, including the suffering of droughts, including historically remarkable droughts, such as federation or millennium. Which would suggest, in turn, that the suffering of another drought is no reason to alter course because the Plan is designed to cope with the fact there are these demands upon a basin with its river systems, subject to droughts from time to time. Now, I don't know whether there's an alternative view to that, namely, that when a drought comes along, the Basin Plan should be abandoned, but you will have probably heard, along with myself, suggestions that so-called environmental water be made available to farmers.

35 MR PETERS: I – I – I suppose my experience tells me that's fraught with danger. When you open those doors, they're pretty hard to close.

THE COMMISSIONER: Right.

40 MR PETERS: And, I mean, that politically for me is – not politically, but for me as a farmer and a farmer representative of the past, that's fraught with danger for me to say that, but – and it won't happen, although the way – what's going on in Canberra, I shouldn't say – you wouldn't know what would happen, would you? No, if you said – if you said – I mean, you've got to get – you've got to get a proper balance in the thing. The irrigators are very important. The communities are very important. The – the ecology and the – and the – and the environment is very important. And you can't, you know, you've got to – you've got to treat those all with the same level

of respect. You can't all of a sudden say no, we will let – we will the environment go to the dogs. I mean, I'm saying - - -

5 THE COMMISSIONER: All three have to be maximised.

MR PETERS: Well, I think they do, yes.

THE COMMISSIONER: That's ..... accessed.

10 MR PETERS: If you do that – if you do that, you will know where you're going. I mean, that's what makes me angry with the MDBA plan at the moment. You know, we go through all this rubbish at the moment where we're – you know, we drop it down to 320 and, you know, everyone's happy and whatever, and then, you know, as soon as you get a Labor Government, it will be oh, you know, we spent 17 – \$13  
15 billion and the river's stuffed. Oh, let's have another plan. Let's have the MDBA Plan mark 2.

THE COMMISSIONER: Yes. Thank you. Does that conclude the questions?

20 MR O'FLAHERTY: That concludes my questions, yes.

THE COMMISSIONER: If there's anything else that you wanted to tell me today  
- - -

25 MR PETERS: There will be a hell of a lot I could, but I – I won't think of it till I leave here.

THE COMMISSIONER: So we will be in touch with you about a couple of things. Feel free to add anything that might - - -

30 MR PETERS: Thank you.

THE COMMISSIONER: - - - be stimulated by what we talked about today.

35 MR PETERS: Thank you very much.

THE COMMISSIONER: No, thank you very much.

40 MR PETERS: And thank you for the opportunity. I - - -

THE COMMISSIONER: I'm obliged. Thank you.

45 <THE WITNESS WITHDREW [11.37 am]

THE COMMISSIONER: We will adjourn until 5 to noon, 5 to 12.

MR O'FLAHERTY: Yes, thank you, Commissioner.

**ADJOURNED**

**[11.37 am]**

5

**RESUMED**

**[11.56 am]**

10 THE COMMISSIONER: I'm ready.

MR O'FLAHERTY: Yes, Commissioner. Thank you. Our next witness is Mr Geoff Wise.

15

**<GEOFFREY ALLAN WISE, SWORN**

**[11.56 am]**

**<EXAMINATION-IN-CHIEF BY MR O'FLAHERTY**

20

THE COMMISSIONER: Please sit down, Mr Wise.

25 MR O'FLAHERTY: Mr Wise, you've provided the Commission with both a submission with attachments and a statement. I just want to take you, first, to your statement, if I could. There should be a white folder with your name on it in front of you there. Now, behind tab 1, there should be your witness statement there.

30 MR WISE: Correct.

MR O'FLAHERTY: And that's a witness statement dated 21 August 2018 consisting of six pages and 40 paragraphs. Is that statement true and correct to the best of your knowledge and belief?

35 MR WISE: That is.

40 MR O'FLAHERTY: I tender the witness statement of Mr Geoffrey Wise dated 28 August 2018. Just taking you to the background of that, I just wonder if you could – you refer to your various positions since about – well, from the nineties throughout to present day. You – in paragraph 4, you talk about the – your position as chair of the Western Lands Advisory Council. What was in – what did that role entail? What was the functions assigned to that role?

45 MR WISE: Well, it's a role that's linked directly – well, was linked directly to the Western Lands Act in New South Wales.

MR O'FLAHERTY: Yes.

MR WISE: And within that legislation, the Western Lands Advisory Council was prescribed. It was an independent chair, which is the role that I have, plus a range of other – diverse range of other representation across the western division of New South Wales, where the Western Lands Act applied, being 40 per cent of New South  
5 Wales which is fundamentally all leasehold land. The make-up of the council is diverse, two members of local government, two indigenous representatives, two New South Wales farmers, and a few other ..... - - -

10 MR O’FLAHERTY: Sure.

MR WISE: - - - a diverse role, answerable to the Minister for Lands in New South Wales, but, again, the – written within the legislation is the terms of reference and the last one is:

15 *To be able to raise any matters of concern or interest with – across the western division.*

MR O’FLAHERTY: Right.

20 MR WISE: So that’s a very broad one, and it has been used.

MR O’FLAHERTY: Yes.

25 MR WISE: I should just clarify that on 30 June, the Western Lands Act – this year, Western Lands Act and all our land legislation, Crown land legislation in New South Wales was absorbed into a single Crown Lands Act.

MR O’FLAHERTY: Sure.

30 MR WISE: And so on 1 July this year, the name of our Western Lands Advisory Council changed to Western Lands Advisory Committee.

MR O’FLAHERTY: Yes.

35 MR WISE: And it’s – all the formalities have been taken out of the legislation since 1 July. But we still - - -

MR O’FLAHERTY: But in terms of the practical work, that hasn’t changed.

40 MR WISE: Best indication of that, on 29 June, a letter was dated to me by the Minister for Lands reappointing me for another three years.

MR O’FLAHERTY: Yes.

45 MR WISE: Effectively, my role changed two days later, but I’m assuming he meant to keep going.

MR O'FLAHERTY: Right. You refer in the following paragraph to some of your previous work as the regional director of Far West Department Of Land and Water Conservation, and, in brackets, including a few title changes. That's just because the department keeps on changing its name, I imagine.

5

MR WISE: Yes, during the 11 years that I was in that role - - -

MR O'FLAHERTY: Yes.

10 MR WISE: - - - I'm not sure how many different title changes - - -

MR O'FLAHERTY: Sure.

MR WISE: - - - but it was all exactly the same role.

15

MR O'FLAHERTY: Yes. And do I take it from your description that a large part of your role was involved in the implementation of the cap on diversions that was placed in '95.

20 MR WISE: Certainly a significant part of the role was on that.

MR O'FLAHERTY: Yes.

25 MR WISE: And it also coincided with a massive reform in native veg legislation - - -

MR O'FLAHERTY: Sure.

30 MR WISE: - - - and that took up an enormous amount of time.

MR O'FLAHERTY: Yes.

MR WISE: And there's still a second half to my job at the same time as Western Lands Commissioner which took up a lot of time as well.

35

MR O'FLAHERTY: Yes.

MR WISE: But we all have 24 hours in a day.

40 MR O'FLAHERTY: And I don't mean to diminish the other aspects. This is a very specific Commission, so I latch on water issues.

MR WISE: And that was a very - - -

45 MR O'FLAHERTY: So don't take that as a measure of disrespect.

MR WISE: That was a very significant part of the job.

MR O'FLAHERTY: Yes.

THE COMMISSIONER: Where were you based? Where was your - - -

5 MR WISE: Based in Dubbo. Yes. The headquarters for the Commission moved to Dubbo in the mid-nineties.

10 MR O'FLAHERTY: And was it during that, that you – you say you developed an understanding of the importance of low flows. Did you have – did you – were you exposed to modelling of those low flows as a result and management decisions about the river in that role? Is that where you were, I suppose, first exposed to that issue, or was it - - -

15 MR WISE: If I just go back a step.

MR O'FLAHERTY: Yes.

20 MR WISE: It was certainly during that phase, that period from '95 to 2006, that I got a heavy understanding of all the politics and the legalities and everything behind - - -

MR O'FLAHERTY: Yes.

25 MR WISE: - - - water management, but having worked across the same area for – for the previous 30-odd years and including, well, I ended up as Regional Director of Agriculture for the north-west quarter of New South Wales, you know, I was already – had my head around, from a practical point of view, of the importance of the Darling River being the artery of the outback, virtually.

30 MR O'FLAHERTY: Yes.

35 MR WISE: But no, as far as then, specifically, on things like modelling, in – in representing the State Government in leading a diverse team of experts in water, in working with community to develop a water – the cap strategy or the recommendation to the government for the cap strategy, things like the IQQM model was being rolled out as – by our department as – that I worked with, as the model that had to be used for all that, and that model was being regularly reviewed up to and beyond when the government made a decision on cap in 2006. Now, one of the heads of consideration that was signed off by the government and – and different –  
40 other representative for the cap included provision to amend it again with further information.

MR O'FLAHERTY: Yes.

45 MR WISE: And I'm not sure that that further information was ever developed.

MR O'FLAHERTY: Yes, and we will come to the longstanding theme which is – comes from your – your documents, that the provision of information has been a constant concern of yours throughout your interactions, more recently, with the MDBA.

5

MR WISE: Yes.

MR O'FLAHERTY: Now, in between times, between your role as – in terms of the – your roles in the New South Wales Government, you were the General Manager of the Bourke Council.

10

MR WISE: Correct. I should correct what Malcolm – Mal Peters said earlier - - -

MR O'FLAHERTY: Sure.

15

MR WISE: - - - is he called me the Mayor, but to my knowledge, I was only the General Manager.

MR O'FLAHERTY: Right. Okay. That was enough responsibility.

20

THE COMMISSIONER: I wonder whether the Mayors from time to time said they were only the Mayors when you were the General Manager, I mean.

MR WISE: Well, in response to that, Commissioner, the Mayor who enticed me to go there and looked after me for a while, the next council election he said he can retire from council now because I was there. So read into that what you like.

25

MR O'FLAHERTY: Yes.

THE COMMISSIONER: It has been known to happen, yes.

30

MR O'FLAHERTY: Then moving on to your involvement with the Northern Basin Advisory Committee, you were invited to join that. Was that an invitation from Mr Knowles, the then Chair?

35

MR WISE: Correct.

MR O'FLAHERTY: Did you have interactions with Mr Knowles as you – in your previous roles?

40

MR WISE: Absolutely. He was the Minister for – or responsible for the – certainly all the vegetation reform, in particular.

MR O'FLAHERTY: Sure.

45

MR WISE: And – but also with water, and, yes, quite frequently we had, yes, just direct dealings from my – my future role as Regional Director of Land and Water Conservation - - -

5 MR O’FLAHERTY: Yes.

MR WISE: - - - but also, yes, we talked a lot about my role as Western Lands Commissioner, as well. So through that period, I got direct dealings with him very much, and that was his choice to select me to go on the committee - - -

10

MR O’FLAHERTY: Yes.

MR WISE: - - - for which I was privileged.

15 MR O’FLAHERTY: You – over the page in your statement, in paragraph 7, you talk about you have drafted many reports and minutes for consideration. Was that a – was there any particular reason you felt compelled to put this in writing, or was that – is it your practice that you wanted to put this in writing so it could be discussed as a point of discussion at relevant meetings?

20

MR WISE: Since – yes, my attitude, the best way to contribute constructively is to come prepared and prepare other people on what you’re going to talk about - - -

MR O’FLAHERTY: Sure.

25

MR WISE: - - - Rather than just arriving at a meeting and shooting from the hip, so to speak.

MR O’FLAHERTY: Yes.

30

MR WISE: I just felt I was adding – adding efficiency to the process - - -

MR O’FLAHERTY: Yes.

35 MR WISE: - - - adding detail to the process, probably getting my own thoughts more clearly focussed. And – and – and if it then gives any receivers of any of those reports that I’ve written, if they want to go back and reassess, well, it’s there, rather than, you know, what did he say at the meeting?

40 MR O’FLAHERTY: Yes. You’ve – you talk about a consistent theme in a lot of these documents that I’ve taken from is the issue that’s in the next heading of your statement, ‘The Problem with Averages’. You talk about the difficulty of using an average as part of a model when trying to implement or at least – I don’t want to use the word “regulate” because that has got a different term – to manage the water  
45 resources of these highly variable systems. You make the point that annual averages are just simply – they’re sort of not fit for purpose. Is that a fair summary of your core issue in that – on that front?

MR WISE: The word “average” has a particular meaning.

MR O’FLAHERTY: Yes.

5 MR WISE: But the relevance of it always has to be questioned. And the greater the  
variability of whatever it is that’s being averaged, the more I think it’s relevant to  
question that, you know, to question it. And I guess I should add a little bit more of a  
background, as I originally graduated as a – in veterinary science. I did post-  
graduate studies in epidemiology and epidemiology is about diseases in populations,  
10 or, if you like, dis-ease in populations. And whether that’s a population of water in  
the – in the Murray-Darling Basin system or a population in humans or whatever.  
It’s also a significant component of epidemiology is cause and effect, did this cause  
the effect?

15 MR O’FLAHERTY: Yes.

MR WISE: And so things like averaging, you’ve always got to question. And from  
that –it was a long time ago I did that study. If I can jump forward to two days ago,  
on the ABC, something came up that the headlines, ‘Are You Average in Any Way  
20 or Do You Sometimes Stand Out from the Crowd?’ And this is an article that, you  
know, I printed off. The heading really is ‘Do You Fit The Algorithm’s Mould, if  
Not, They Might Screw You’. And I’m quite happy to table that document. But  
things like – it straight-out says that, you know, averages have their place, but – and  
as a result, some decisions are fair and other decisions are unfair. It’s so bizarre to  
25 me that we’re in a state where there’s no requirement to prove the benefits of  
automation in the face of proven harms, and that automation, averaging, modelling  
and so forth.

THE COMMISSIONER: Now, I take it – I should confess I’ve had some  
30 professional exposure to epidemiology, as well. I take it that you’re pointing to the  
fact that it’s a meaningless and misleading statement to say, for example, on average,  
individuals in this room won’t suffer a particular disease. What matters is the disease  
is suffered, fortunately rarely, but nonetheless, epidemiology can study it. It would  
never bother to say, “On average, you won’t get it”. That would be the meaningless  
35 proposition that the risk is less than 50 per cent which, fortunately, is true of most  
diseases.

MR WISE: Yes, but as I said, I broaden the word “disease” to dis-ease.

40 THE COMMISSIONER: Quite. With a hyphen. Right. I understand that.

MR WISE: And so, really, what I’m trying to say – averages have got a place in  
some circumstances. They don’t have a place in other circumstances.

45 THE COMMISSIONER: Well, I ought to take that up immediately with you. And  
this is, particularly, as Mr O’Flaherty has, I think, drawn to your attention, this is  
particularly apropos your paragraph 9 in your statement, which includes the

important proposition that averages are too simplistic an approach in a highly variable system. It seems to me that the – and, certainly, if you look at the attached intergovernmental agreement scheduled to the Water Act, where you will find a bit more detail about this, the Water Act was plainly legislated for a Basin where it was understood as what I might call a fact appreciated by Parliament, that the systems were highly variable, highly variable.

It means that when you come to look at critical propositions in the Act, and you take that into account, it may be – I want to test with you that it's not the fault of the Water Act if averages have been used in an overly simplistic way. Let me explain. Section 23 of the Act requires the long-term average sustainable diversion limit to reflect an environmentally sustainable level of take. And so there's that expression we're talking about, the long-term average, and whether it's 114 years or longer, that's the measure of things we're talking about. Notoriously, as you will see from the graph on the chart I'm pointing out to you, there is a very large degree of variability over that time.

But for the long-term average sustainable diversion limit to reflect an environmentally sustainable level of take, there has to be observance of what the statute defines as the level at which water can be taken from that water resource. So we're now talking about something physical, actually, water being consumed, not on average, but being taken, which if exceeded, would compromise, among other things, key environmental assets, key ecosystem functions, the productive Basin and key environmental outcomes, and they are further defined.

And in terms of the Authority determining these matters there is also the obligation to follow the principles of ecologically sustainable development which significantly say that decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations. So that the word "average" is used but plainly in the context where variability is recognised, the short term has to be taken into account as well as the long term and in particular, the ecosystem functions and environmental outcomes have to be the drivers and they, of course, in this Basin, exhibit the characteristics of a highly variable system from which it seems to me it follows that you can't blame the Water Act for an averaging approach.

You may well blame people who have read it too quickly or perhaps have not read it enough, but the Water Act seems to me to have – they use the long-term average because there has to be a single figure. It's a construct off which, among other things, annual allocations may follow, but the statute requires a single figure. It's a conventional figure. It may not describe in any one year what is actually taken in that year. Do you follow that reasoning? Does that make sense to you or not?

MR WISE: I certainly did follow that reasoning. I regularly apologised to the Authority that I believe that – well, I used to say the tool that they had to work with in the Northern Basin Review was deciding on a figure. And my comment to them was it probably doesn't matter what that figure is, I had no – no belief that no matter

what that figure was, whether it was, you know, when it came down to – you know, towards the end whether it was 278 or 415, that figure by itself was going to have no significant impact on delivering the objectives of the – of the Basin Plan and what was expected.

5

THE COMMISSIONER: Do I gather correctly from your evidence and in particular something for which I'm very grateful, the comprehensive collection of submissions that you've made elsewhere.

10 MR WISE: I could have given you more but I thought that was enough.

THE COMMISSIONER: I don't know whether it is not having seen what I haven't seen but what I have seen is extremely helpful, and I've got a lot of benefit from it. But do I understand in summary that using the language of environmental watering requirements, and using the scientific and ecological exercise of trying to render for the environmental watering requirements flow indicators, which are both volume and time and place, that what you want to impress upon me is that if you just look at discharge or flow, you get it all wrong. And that you have to start and finish with the environmental watering requirements, work out what you think you need to meet what the statute calls for. Try it, and then check whether you've achieved it. Have I got correctly one of the messages you want me to get?

15

20

MR WISE: No, you said a lot there. I'm just trying to think how best to respond.

25 THE COMMISSIONER: I appreciate it's complex.

MR O'FLAHERTY: Yes, it is complex. I guess I continually go back to why did the government of the day decide to have a Basin Plan, what was the problem? What were the problems they wanted to address? And interestingly, in documents even up to some of the most recent ones, in the public documents as distinct from the objectives and whatever in the Act, but they quote three examples. One is an increase in salinity. One was the mouth of the Murray closing over. And the third one was the 1990 or '91 or whichever blue-green algae, you know, world's longest blue-green algae. And, you know, they cited those sort of problems as well as then reading the objectives of the various legislation, Commonwealth and State and for the Basin Plan. And my continual focus was whatever business we're trying to give advice on, which was limited very much to an SDL review, is it – is the answer to that going to make any difference to what the problems were?

30

35

40 THE COMMISSIONER: Yes. So I think you name three of the - - -

MR WISE: Yes, I've quoted them.

45

THE COMMISSIONER: - - - headline symptoms of environment - - -

MR WISE: I've quoted the headline they've repeated even up until recent times. And it's why I also believe what has been lost in – in the big picture is – and I should emphasise I'm only talking about the northern Basin.

5 THE COMMISSIONER: Yes.

MR WISE: And most of my interest has, because of my past history I guess, has been in what do we want the Darling River to look like, or if you like, the Barwon-Darling River to look like because it's in the middle of everything. It's the conduit  
10 between the north and the south. It reflects what's happening upstream. And something – I was only talking to people outside during the recent break. In my view, we've forgotten about the natural river. Before we then talk about extractions from irrigators or towns or evaporation or whatever, or additions through buying back environmental water. And the natural river is where, in my view, there's  
15 probably very few people in society who don't want it to be optimised, its reliability and health. Now, that's – I would have thought that's what the original intent of saying that we've got a problem in the – in the Murray-Darling, the reliability and health of the river systems is under challenge.

20 THE COMMISSIONER: That's – we've taken to referring to the legislated fact. That's a reference to, if you will forgive the expression, sub-paragraph 21(2)(a)(i) of the Act which relevantly says that:

*The Basin Plan must be prepared having regard to the fact.*

25

The fact:

*That the use of the Basin water resources has had and is likely to have significant adverse impacts on the conservation and sustainable use of biodiversity.*

30

And that I think is the legislated manifestation of the matters – some of the matters you've just referred to, I think.

35 MR WISE: Well, I'm sure it is, and I just try to talk common language.

THE COMMISSIONER: Yes. You don't think that's common?

MR WISE: Well, I thought mine was more common. I thought healthy and reliable  
40 is pretty common.

THE COMMISSIONER: Parliamentary counsel will be horrified to hear what you say, yes.

45 MR O'FLAHERTY: "Common" is a relative concept.

THE COMMISSIONER: Well, now, that legislated fact leads, as you say in your evidence, to your perception that there would be very few people indeed who are happy to see that degradation continue and so there's other language in the statute which mercifully is a bit closer to ordinary English, talking about protecting and  
5 restoring the biodiversity and the ecological and environmental outcomes. I have gathered from your Northern Basin Review recollections and reflections that you feel – looking back on it, some frustration about a failure to anchor the SDL review of a figure in the environmental outcome substance. Is that correct?

10 MR WISE: I accept there had to be a figure.

THE COMMISSIONER: Yes.

MR WISE: My frustration was a lack of – for a long, long period of time – that  
15 ultimately started to fall into place a bit, but for a long, long period of time there was a lack of preparedness, even from the very beginning, to say the course we're setting out on, if we just stay focused on arriving at a figure are we going to achieve - - -

THE COMMISSIONER: Yes.

20

MR WISE: - - - the intent. And so why as early as February 2013 when we had been asked to contribute to, you know, what extra scientific work needed to be done. This is a report I gave in February two thousand and – 130209.

25 MR O'FLAHERTY: That's the document, Mr Wise, I think behind tab 2, (ii).

MR WISE: 2(ii), correct. Gee, I learn your system. But where the Authority was going off to do a whole heap of scientific work but I was saying the more  
30 fundamental science is getting great clarity of the problem that you're trying to address.

THE COMMISSIONER: Yes.

MR WISE: This is on page 2, getting that clarity agreed between all stakeholders,  
35 not just one individual going off saying this is the problem and then being open minded about potential options to address it.

THE COMMISSIONER: Yes.

40 MR WISE: The word "toolkit" hadn't been invented at that stage of the language.

THE COMMISSIONER: I still don't know what that's meant to convey to me.

MR WISE: But obviously that's effectively the sort of thing I was trying to get at  
45 but just - - -

MR O'FLAHERTY: Is that because the - - -

MR WISE: Just arriving at a figure is not going to arrive at a solution to the problem that - - -

5 MR O'FLAHERTY: Yes. You make a point that the focus on that figure and what I take is the focus on reducing, or this is where we get into semantics – increasing the SDL, increasing that figure is – has been problematic, there needs to be a more comprehensive holistic assessment of what the problem is, and the solutions to it.

10 MR WISE: Well, as I very simply make my reaction from very early period, it doesn't matter what that figure is. It's not going to solve the problem for the Barwon-Darling.

MR O'FLAHERTY: No, it's means to an end.

15 MR WISE: So - - -

MR O'FLAHERTY: One of many means, yes.

20 MR WISE: So there has to be other things that are going to achieve the outcomes that were desired.

25 THE COMMISSIONER: Now, you've got, I take it, some familiarity with chapters 8 and 10 of the Basin Plan which are to do with environmental watering and the Water Resource Plans.

MR WISE: You will need to walk me through them.

30 THE COMMISSIONER: I don't mean chapter and verse. You're aware that the Basin Plan requires there to be a very ordered scientifically-based specification or stipulation of what's called an Environmental Watering Plan. And then that's localised through Water Resource Plans which have their own environmental planning and stipulation, alongside consumptive planning.

35 MR WISE: Ideally, yes.

THE COMMISSIONER: Well, I will probably end up reporting it's not just ideal. It's what the law requires.

40 MR WISE: Yes.

THE COMMISSIONER: I would go so far as to quote you in relation to common sense and suggest that common sense would suggest you don't bother to do something to achieve an aim unless you set out to achieve the aim and find out whether you did.

45 MR WISE: Yes.

THE COMMISSIONER: What I would call an empirical approach. Against those standards, what do you identify as the principal shortcomings that you've talked about in your evidence of the Northern Basin Review? I think you've just told me that – and I may have misunderstood this – that they didn't have explicitly in mind environmental results or outcomes; is that right? Or have I mistaken that?

MR WISE: They identify the site specific indicators and what they're aiming to get and whatever. So the theory was there, but – well, the easiest way I describe it, I think the whole operation of the Northern Basin Review effectively got so lost in the wood for the trees, you know, that it more or less kept forgetting what – what's the whole purpose, what's the intent. So it got bogged down in – in let's do this bit of science, let's do this bit of modelling, whatever, and how many boxes will or won't it tick. And, well, again, I quite openly said to the CEO and the Chair of the Authority and the Authority members that I felt sorry for them if the only – only lever they could use was the model because that's fundamentally all they wanted to work with. They – they didn't want to say can we study or can we come to our recommendations and conclusions using any other information, other than models? And – and so that's where I felt, well, that – and I said to them, I felt sorry for them if their only focus is on ending up with a figure, and their only way of getting there is using a model.

20

THE COMMISSIONER: Yes.

MR WISE: Because I would almost come back and I say, if you don't know where you're going any road will get you there.

25

THE COMMISSIONER: Yes.

MR WISE: And – because they had seemed to forget where they were aiming to get to.

30

THE COMMISSIONER: Now, you've seen I think a response by the Authority to a repeated criticism by you concerning what I will call a scale of – I try to use a neutral expression – margins of error in estimations numerically expressed, and, as it happens, the size of the recovery for the environment that was in question at the time of the review, for example, 320, etcetera. And I think you've seen a response by them suggesting that you had made the mistake of accumulating by addition by reference to a standard deviation rather than a standard error.

35

MR WISE: I never got a response from the Authority on - - -

40

THE COMMISSIONER: Right.

MR WISE: On that suggestion about doing that bit of science.

45

THE COMMISSIONER: Yes.

MR WISE: Yes, they – I don't recall ever seeing any written response. You know, it was just, you know – you know, from even – to my mind, it was – it was just another piece of science that would have been good science for them to do to understand whether what they were doing was good science.

5

THE COMMISSIONER: Yes. Like all modelling, it requires to be calibrated from time to time to reality.

MR WISE: Yes. Correct.

10

THE COMMISSIONER: All models are, at least in theory, provisional, in that they may be superseded by a better model - - -

MR WISE: Yes.

15

THE COMMISSIONER: - - - which you will only know about if you get more information.

MR WISE: Yes.

20

THE COMMISSIONER: Yes.

MR WISE: So, you know, to my mind, it was just an easy opportunity to think outside the square and – and, well, quite frankly, virtually everything I said and any numbers that I ever gave them, I pleaded with them to review what I said. I – I could be wrong, and, you know, one of the things that I did do that towards the very end, and the CEO wrote back to me and he said, “Yes, you got it right”, but, you know, that was purely at – after the Four Corners report and every senior politician in Australia seemed to be saying that irrigators of the Barwon-Darling only take six per cent of the water, and after I heard that so many times on television, I thought that doesn't make sense to me. If you read the background document, it's written in the background document that irrigators in the Barwon-Darling only take six per cent of the water, so that was a reference that some of the Ministers were probably using, but in about half an – maybe an hour of analysing crude data, the range in that, to get to the six per cent, was up to irrigators taking 143 per cent extraction in one year, compared to what ended up at Wilcannia. And that was the one that I got a response back saying, “You're correct.”

25

30

35

THE COMMISSIONER: Yes. Your point being that that's enough to demonstrate a massive impact on what gets to Wilcannia.

40

MR WISE: Yes.

THE COMMISSIONER: Yes.

45

MR WISE: Well - - -

MR O'FLAHERTY: And that's a - - -

MR WISE: At – at the specific level – at the bigger level, that's why be careful of using things like long-term averages.

5

THE COMMISSIONER: Quite.

MR O'FLAHERTY: Yes, I was about to say, because that six per cent is a great example, is it not, of the misleading quality of using long-term averages. Six per cent on an average but because of the higher variability depending on whether it's a high flow season or a low flow season, the degree of take by irrigation is a moveable proportion, isn't it?

10

MR WISE: Absolutely.

15

MR O'FLAHERTY: Yes.

THE COMMISSIONER: Well, particularly with the Darling, I gather from what you've written, that I've read, the maintaining of low flows as well as what I will call the replenishment of Menindee is important to your - - -

20

MR WISE: I think it's important to everyone. I think that gets back that society – for a river like the Darling which is an ephemeral stream, always has been, they would like it to be – optimise its health and – and reliability, and reliability meaning some flow, and that's why I talk about the natural river, before even talking about what can be played with.

25

THE COMMISSIONER: Yes.

MR WISE: And – and I know that it's never going to be flowing 100 per cent of the time, it never has and it never will, but it's the degree of change that has occurred in the last quarter of a century that just put the flags up for things like the introduction of cap, introduction of the Basin Plan, you know, the pendulum swung too far one way, we've got to swing it back. You know, I think there's a lot of reason to ask now whether the – the more regular – greater regularity of seasonal conditions are – genuinely reflected climate change or just natural climate variability, but irrespective, do we want to optimise that health and reliability as much as possible of low flows?

30

THE COMMISSIONER: Yes.

MR O'FLAHERTY: In terms of the concerns you were raising about low flows, just on this document on page 1 in terms of this, this document itself – it - - -

THE COMMISSIONER: Sorry, which document?

45

MR O'FLAHERTY: Sorry. This is behind tab 2, Roman (ii).

THE COMMISSIONER: 2(ii). Right.

MR O'FLAHERTY: This refers to a draft project proposal. Was that – do I  
5 understand that to be a, one might say a project plan for the Northern Basin Review  
that they were developing at that time? Is that - - -

MR WISE: Correct, and I - - -

MR O'FLAHERTY: - - - a fair - - -  
10

MR WISE: And – and I don't have a copy - - -

MR O'FLAHERTY: No, I know. That's fine.

15 MR WISE: - - - of the original, I don't think, but if you – if you got the time - - -

MR O'FLAHERTY: But that's the nature of the document.

MR WISE: - - - time in perspective - - -  
20

MR O'FLAHERTY: Yes.

MR WISE: - - - I think our committee was formed – formally went public or  
25 announced in about September 2012.

MR O'FLAHERTY: Yes.

MR WISE: And our first meeting, which is just a getting to know you meeting, was  
30 - - -

MR O'FLAHERTY: Yes.

MR WISE: - - - in my recollection, a few days before I finished my job at Bourke,  
35 which was early in October 2012.

MR O'FLAHERTY: Right.

MR WISE: I think we had one more meeting then before Christmas, from memory,  
40 where – and at – at that, you know, the things were being laid out to us a bit, one of  
which was, from the Authority, “Here's our suggestion what science - - -

MR O'FLAHERTY: This is what we're going to do.

MR WISE: - - - we might do. What do you think?"  
45

MR O'FLAHERTY: Yes.

MR WISE: And – and I gave that a response, even though I qualified it by saying I haven't read it in proper detail.

5 MR O'FLAHERTY: Yes. You point in – this is the third dot point which talks about challenges for modelling water recovery scenarios, and the Northern Basin requires investment in modelling event based environmental flow scenarios. Was that largely due to the issues about low flows and the difficulties of the models to take into account those low flows?

10 MR WISE: February 2009 was a long time ago.

MR O'FLAHERTY: 2013, I think, but - - -

15 MR WISE: I – I would think it was as – it – it was probably a bit of more complex than that.

MR O'FLAHERTY: Sure.

20 MR WISE: It was probably modelling whatever the event, whether it's a very low event or a very high event.

MR O'FLAHERTY: It's both I guess, is it? Yes.

25 MR WISE: Relative to, you know, the – the environmental expectations that were going to come out at the end of the four years of review.

MR O'FLAHERTY: Yes.

30 THE COMMISSIONER: Now, if you, in that bundle of documents of yours, go through to item 2(vii).

MR WISE: Right.

35 THE COMMISSIONER: That's four years later.

MR WISE: Yes.

40 THE COMMISSIONER: And I think there are some similar messages, perhaps in more pointed fashion being expressed there, under the headings 'Critical Concerns Expressed by Geoff Wise' and 'Critically Important Recommendations by Geoff Wise'. That's in the same context, is that right?

45 MR WISE: I believe absolutely. And I – probably just a bit more direct and a bit more frustrated and concerned and whatever.

THE COMMISSIONER: Yes. Now, I see that in item (2)(b) under your critical concerns on the 2016 document, you talk about there needing to be changes to

ancillary administrative considerations including the total integration of overland flow and water harvesting management. That includes what's sometimes called floodplain harvesting; is that right?

5 MR WISE: I believe that's the wording. That's what I ..... yes.

THE COMMISSIONER: So overland was on the floodplain.

10 MR WISE: Can I just, an override on that. Back in 2009... had five years where I really wasn't involved in water issues very much at all. I was much more involved in responsibility as Bourke Shire Council, and we had a lot of social issues and whatever, even managing a budget. But – so I probably hadn't thought through in February 2009 – 2013, sorry, things like some of those other bigger picture issues that are all part of it all.

15 THE COMMISSIONER: Yes.

MR WISE: And so, you know, that had come more into focus a few years later.

20 THE COMMISSIONER: Thanks.

MR WISE: And I believe should still remain very strongly in focus.

25 THE COMMISSIONER: Yes. Thank you.

MR O'FLAHERTY: The – whilst we're on this document and I will probably return to it, there's – no, I think I will return to it. The – under that heading 'Critical Concerns', you repeat the concern about long-term averages.

30 MR WISE: Correct.

MR O'FLAHERTY: Is that – that, I understand, is linked with the issue of the fact that the models were – is that linked to the issue that the models aren't particularly good in assessing the variability of the system?

35 MR WISE: Well, it certainly – it would be linked. I didn't use the word "models"  
- - -

40 MR O'FLAHERTY: No.

MR WISE: - - - in that sense, but the fact that because every discussion we ever had with the Authority, that was fed back to us as modelling responses. So yes, if we raise an issue, well, we model that, and this is the response. So yes, very definitely a linkage. So – but all the communication was linked.

45 MR O'FLAHERTY: Yes.

MR WISE: Same with modelling.

MR O'FLAHERTY: I mean, we refer to modelling event – you refer to modelling event based environmental flow scenarios back in 2013. Do I take it from the fact  
5 that you still raise your concerns in your statement about the models, that that suggestion of investment in those models wasn't taken up?

MR WISE: No. Not to my knowledge, definitely not.

10 MR O'FLAHERTY: You - - -

MR WISE: Because even broader, it has only been in the last, well, second half of 2016, I would guess, that the Authority has really come to grips with the fact that they needed toolkit things which – some of which more or less focus more toward  
15 event management, flow event management as distinct from just averaging and whatever.

MR O'FLAHERTY: Yes. I wanted to touch on that. You talk about flow event management in particular with respect to managing low flows, but I understand it  
20 would relate to any kind of flows, but it's, I suppose – is it more important to have good flow event management when you've got less water to manage?

MR WISE: Absolutely.

25 MR O'FLAHERTY: Yes.

MR WISE: Just to expand a bit more.

30 MR O'FLAHERTY: Yes.

MR WISE: My, your attitude on a big river, on the Darling, which happens occasionally, doesn't matter what happens, the river will dominate. Most commonly what happens is there's all sorts of frantic community and political and emergency services to try to mitigate the damage caused by the river.  
35

MR O'FLAHERTY: Yes.

MR WISE: So a big river doesn't – no one needs to be worried about it because it runs its own course and – and it will outsmart anyone, and the amount of extraction or anything else - - -  
40

MR O'FLAHERTY: Sure.

MR WISE: You know, we should give water away in a big river. It wouldn't  
45 matter.

MR O'FLAHERTY: Yes.

MR WISE: The issue for the artery of the outback, the Barwon-Darling, is, in my view, solely focused on low flows.

MR O'FLAHERTY: Yes.

5

MR WISE: So the greater we can improve them, the greater we're looking after the natural river, the greater we try to get back to the very reason for the water reform.

MR O'FLAHERTY: Yes.

10

THE COMMISSIONER: Is that in a sense, at least partly, because the big floods will look after themselves, as it were?

MR WISE: Is – that again?

15

THE COMMISSIONER: That we aren't – the big floods will still happen.

MR WISE: Absolutely.

20

THE COMMISSIONER: Thanks.

MR WISE: And - - -

MR O'FLAHERTY: Yes, it's – yes.

25

MR WISE: In 2012, when I was at Bourke, was the sixth highest flow recorded in white man history at Bourke.

THE COMMISSIONER: Yes, no, I've read that. Yes.

30

MR WISE: And I used to try to avoid using the word flood because - - -

THE COMMISSIONER: Yes. I'm sorry. I understand your point.

35

MR WISE: Yes.

THE COMMISSIONER: Yes.

MR WISE: It – it was - - -

40

MR O'FLAHERTY: I think you used the word big river. Yes.

MR WISE: Yes, just a big river. And – and – and if I can just elaborate because I've been on air on what I'm about to tell you, that, you know, sitting down at Bourke we knew it was coming for six weeks, and on an ABC Radio interview I – I somehow or other empathised with pregnant women because they do all the planning

45

for the birth of their child. We had done all the planning for this massive event that was going to hit us, and – and we're just sitting back and waiting.

THE COMMISSIONER: Yes.

5

MR WISE: We knew it was coming. We knew the town was going to be isolated, and it was a spectacular event. And I drew the analogy with a – a pregnancy and childbirth.

10 THE COMMISSIONER: I doubt as males we should continue too much this way of talking about it.

MR WISE: But anyway.

15 THE COMMISSIONER: But I do understand, I think.

MR WISE: So – no, and we hope that we continue to get those big rivers as frequently as they ever occurred in the past.

20 THE COMMISSIONER: Yes.

MR WISE: But even as you look at them, the – the intervals between them has been very variable, so, you know, the - - -

25 THE COMMISSIONER: Whereas the emphasis is – you're putting, I think, is that the low flows really can be devastatingly reduced or eliminated.

MR O'FLAHERTY: Yes, managed.

30 MR WISE: Yes, a small amount of extraction can have a big impact on a low flow.

THE COMMISSIONER: Yes.

MR WISE: Or a small amount of intervention can have a big impact.

35

THE COMMISSIONER: Yes.

MR O'FLAHERTY: Just in terms of practically how that works – and you talked about how you were practically involved in managing low flows in your role in land and water conservation. Do I take it – do I understand it correctly that it involves essentially assessing the volume of the flow and essentially apportioning percentages or shares or volumetric shares of that low flow, having regard to all the relevant issues a water manager has to have regard to, including environment, consumptive use, stock and domestic irrigation. Is that – that sounds – sounds simple to describe, hard to implement.

45

MR WISE: I was even more simple than that, quite frankly.

MR O'FLAHERTY: Right.

MR WISE: You know, I had come into the role of managing water from no past experience in it.

5

MR O'FLAHERTY: Yes.

MR WISE: And being in the hot seat with the Minister's delegated authority on virtually everything. And, you know, I scratched my head and thought how am I going to do this, and again just focused on – on a low flow that was coming down, and I did talk to a few people, but I came up with a very simple figure in my head that if there's a volume of water upstream, a third of it, through natural transmission of soakage and evaporation – and there's a seasonal impact on all this, but - - -

10  
15 MR O'FLAHERTY: Yes.

MR WISE: - - - a third of it will soak in and evaporate. A third should be managed to get right down the bottom of the system. And let the extractors take the other third.

20

MR O'FLAHERTY: Yes.

MR WISE: And that was my simple management decision.

25 MR O'FLAHERTY: Sure.

MR WISE: And it worked. But it worked not because I just sat in the offers and said this is what it is, it worked because I pulled together the key stakeholders from one end of the river to the other, you know, from Central Darling Shire, the Shire was represented, being down the bottom, all the councils, irrigators and a couple of others, and we would have regular teleconferences, probably weekly, reviewing how much water there is coming down because it fed from dribs and whatever.

30

MR O'FLAHERTY: Yes.

35

MR WISE: And that's why I made the comment I think in my report. Because of the rules that applied at the time, there was virtually an open-ended rule that the Minister had discretion to irrespective of any rules she could override them, one way or another. And so I could say, well, even though you as an irrigator be entitled to this water I'm not going to let you have it, or conversely even though you as an irrigator are not allowed to have this water, yes, it looks like you can have some. And so – and as far as I was concerned with its absolute raw simplicity, that worked better than what happens now with the low flow. Where very simply a drop of water, even environmental water drops out of a tributary, then the rules say anyone can take it away, suck it out.

40  
45

THE COMMISSIONER: Can I ask in that connection, why you describe water shepherding as the worst possible option to protect environmental water?

5 MR WISE: I say that because I know it's complex. And it is why I say a far better option is for radical review of, more fundamentally the A class extractions on the Barwon-Darling, A class licences, but probably more importantly even some of the – or additionally, though, some of the B class fundamentally – a state Water Sharing Plan, a state Water Resource Plan has the influence of when water can be extracted from different heights or daily flow volumes. That's a far better means of protecting the majority of environmental water. It's not going to protect it all. If, for some reason, the Commonwealth wanted to release some environmental water to piggyback on top of - - -

15 THE COMMISSIONER: Some rain.

MR WISE: - - - you know, a significantly high flow, well, the Water Sharing Plans pumping access provisions probably would miss that. But - - -

20 THE COMMISSIONER: How do you mean would miss that?

MR WISE: Well, licence holders might still be able – you know, if, for argument's sake the – the scientific review that the New South Wales Government commissioned back in the late 1990s where a group of scientists commissioned, called the TOMS report, they recommended - - -

25 MR O'FLAHERTY: That was in '96, was it? 1996 I think you referred to.

MR WISE: '96, was it.

30 MR O'FLAHERTY: I think in one of your documents, yes.

MR WISE: Anyway, they had two recommendations. One was there should be no extraction for any irrigation, using Bourke as their example, the yardstick, below a 500 meg a day flow and no extraction for – fundamentally for cotton or to go into water storage below what they described as the 60 percentile, and the 60 percentile translated to my understanding 1,820 megalitres a day.

THE COMMISSIONER: At Bourke.

40 MR WISE: At Bourke, so their scientific representation was... and no extraction for broadacre irrigation and going into storages below 1,820. That led to, and the government – state government said we're not – not going to allow any increase of the pumping threshold more than 10 per cent from what it had previously been. So that has effectively led through the cap process to no extraction below 350 and no B class extraction below 1,250. Not up to 1,820, but - - -

THE COMMISSIONER: That was, as it were, modifying what the scientists suggested was justified by hydrology and ecology so as to show concern for the human and commercial disruption of change above a certain level.

5 MR WISE: The 10 per cent was, you know, we don't want to – thanks for the good advice but yes, we're going to moderate by only allowing, then go up 10 per cent, but it was still in recognition of – of the importance of protecting lower flows.

10 THE COMMISSIONER: Yes. Well, now, this is part of your explanation to me as to why you describe shepherding as the worst possible option to protect environmental water.

MR WISE: Well - - -

15 THE COMMISSIONER: Shepherding involves the selective use of embargoes on pumping after there has been a pulse or release of environmental – committed environmental water; isn't that right?

MR WISE: Yes.

20

THE COMMISSIONER: So why is it bad, let alone the worst possible?

25 MR WISE: When you drill down a little bit into the technicality of how it has got to manage, there's still – I understand there's clauses somewhere in the legislation that it can't upset the rights of irrigators. There's something somewhere there. And so if an irrigator has got a right to be able to pump even above whatever figure, 1,250 or five – 350 or whatever, and if the environmental water comes in that - - -

30 THE COMMISSIONER: Takes it to that level.

MR WISE: - - - puts it or just above that level which overrides and - - -

35 THE COMMISSIONER: But if you had a system whereby there was an embargo and that once a particular hydrological event is designated as water, environmental water to be shepherded, then at least we will be spared the contradiction in terms of the environmental water being used consumptively.

MR WISE: Correct, yes.

40 THE COMMISSIONER: I understand that may trigger other reactions in the nature of commercial disappointment.

45 MR WISE: And there's another very valuable thing to be explored which is some people are attempting to get it heard through the – what's called the Stakeholder Advisory Panel for the Barwon-Darling Water Resource Plan, and that's something effectively called the first flush rule. So that, you know, after a period where there

has been judged to be a long period with no flow or whatever, for the first next flow that comes down, give it specific ability - - -

THE COMMISSIONER: Priority.

5

MR O'FLAHERTY: This is the daily extraction limits.

MR WISE: The ability to be embargoed.

10 THE COMMISSIONER: This is in particular, I suppose, in order to mitigate against the lengthening of the duration of the, what I call dangerous dries; is that correct?

MR WISE: Well, it – to - - -

15

THE COMMISSIONER: It means that the first - - -

MR WISE: To contribute - - -

20 THE COMMISSIONER: The first opportunity to bring to an end that stretch of dry should be - - -

MR WISE: To shorten the interval between events - - -

25 THE COMMISSIONER: That's right. Yes.

MR WISE: But also to longer that flow event, that next flow event that does come down, to extend it as long as possible.

30 THE COMMISSIONER: You say that's on the table as it were for the WRP being worked on at the moment?

MR WISE: Some of – well, I'm jumping ahead there, you might be interviewing Justin and Julia McClure tomorrow. They might be well worth talking to about that,  
35 but they have tabled it. You had better quiz them as to how much they have been heard. Because the impression I get, I haven't been to any of those Stakeholder Advisory Panel, I'm an alternate delegate to it but the impression I get a lot of things have been tabled and nothing has been heard.

40 THE COMMISSIONER: That's a statement that you're hearing others make about the New South Wales people; is that right?

MR WISE: Mmm.

45 MR O'FLAHERTY: You mentioned about the impact on irrigators and the fact that shepherding the water couldn't affect their entitlements. Is that a reference – if you go to your submission to the Commission? This is behind tab 2(i).

MR WISE: 2(i), right back at the beginning, is it?

MR O'FLAHERTY: Yes, we will be jumping around a fair bit. On page 2, under the heading 'Changes of Objects and Purposes for the Basin Plan', page 2.

5

MR WISE: Page 2, Change - - -

THE COMMISSIONER: Have you got the document which is behind tab 2(i)?

10 MR WISE: Sorry, I'm looking at 2(ii), sorry.

MR O'FLAHERTY: That's all right. I was fearing it might be another tab issue. Fortunately, it doesn't seem so.

15 THE COMMISSIONER: On each page 2, there's a heading 'Changes of Objects and Purposes' about halfway down, do you see that.

MR WISE: Yes, I do.

20 MR O'FLAHERTY: The first dot point, there's a reference to a brief memo for limited circulation stating to the effect that the reliability for irrigation extraction must not be compromised. Is that what you were referring to before?

MR WISE: Sorry ..... again. Under which dot point?  
25

MR O'FLAHERTY: 'Changes of Objects and Purposes for the Basin Plan', the first dot point.

MR WISE: Right, yes.  
30

MR O'FLAHERTY: MDBA issued for brief circulation in the brief memo.

MR WISE: Correct.

35 MR O'FLAHERTY: Is that what you were referring to there? At least that's the policy.

MR WISE: Well, that's one of them.

40 THE COMMISSIONER: That's a manifestation of that problem.

MR WISE: Yes, that's – that's a specific document, but - - -

MR O'FLAHERTY: Yes.  
45

MR WISE: - - - elsewhere, even in the – I think in the background document to the Water Sharing Plan - - -

MR O'FLAHERTY: Sure.

MR WISE: - - - I think they make reference to 'provided the rights of irrigators are not compromised', and I've seen it in a number of documents along the lines,  
5 provided the rights of irrigators are not, or third party impacts or whatever.

MR O'FLAHERTY: Just to identify that document, you should have tucked in the front cover of your - - -

10 MR WISE: Correct.

MR O'FLAHERTY: - - - folder, a document which is 'Basin Plan Water Resource Plan Requirements Position Statement 1H, Potential Reliability Changes'. That's exhibit RCE190. Is that the memo you're referring to?  
15

MR WISE: Well that's certainly one of them, yes. That's the one in evidence.

MR O'FLAHERTY: That's the one in that dot point.

20 MR WISE: And with all due respects, I need someone with your legal ability to be able to tell me in common language what that really means, but no need to worry about that.

MR O'FLAHERTY: Not the time and place at the moment, at least. Is that a - - -  
25

MR WISE: I had a lot of trouble.

THE COMMISSIONER: Is that a convenient time?

30 MR O'FLAHERTY: Yes.

THE COMMISSIONER: We will resume at 2 o'clock.

MR O'FLAHERTY: Thank you.  
35

**ADJOURNED** [1.02 pm]

40 **RESUMED** [1.59 pm]

MR O'FLAHERTY: Thank you, Commissioner.

45 I just wanted to pick up sort of where I left off but not quite. If I could take you, Mr Wise, to your statement, that's behind tab 1. Just on paragraph 25, page 4.

MR WISE: 25. Yes.

MR O'FLAHERTY: This is in the context of discussion where you describe your interaction with the MDBA and I think we've discussed previously about the  
5 concerns you've raised with respect to the models and their ability to reflect low flows, and you will have heard the evidence of Mr Peters about the interactions between the committee and the modellers. Do I understand that it was primarily Ms Durham heading up the modelling team that was interacting with the committee?

10 MR WISE: Peter or Peta Durham.

MR O'FLAHERTY: And she was one of those senior modellers.

MR WISE: I believe she was the most senior modeller at the MDBA.  
15

MR O'FLAHERTY: Yes.

MR WISE: And she frequently addressed our committee.

20 MR O'FLAHERTY: Yes.

MR WISE: Throughout the four or five years.

MR O'FLAHERTY: And was she one of the modellers that you describe in  
25 paragraph 25 as having accepted there wasn't much reliability in the models, dealing with low flows?

MR WISE: I don't actually recall her, you know, I can't recall her saying it too explicitly.  
30

MR O'FLAHERTY: Sure.

MR WISE: And part of the problem, it was very difficult for us to ever get direct responses from modellers. They seem to talk their own language and they would  
35 revert back, you know, not necessarily directly answer the question, as I've got a habit of doing in this inquiry. So – but I think she acknowledged limitations and after all in the document that was tabled this morning - - -

MR O'FLAHERTY: Yes.  
40

MR WISE: - - - where she has responded to one of our other committee members.

MR O'FLAHERTY: Yes.

45 MR WISE: A straight-out acknowledgement to some extent of limitations.

MR O'FLAHERTY: Yes. All right. And you didn't refer to having regard to a report from Bewsher Consulting. Mr Bewsher attended a meeting with the committee, is that right? Or at least, sorry, I will say he attended a meeting with certain members of the committee and the MDBA at some stage; is that right?

5

MR WISE: I think he did both but I recollect that he did – I'm sure he did give a presentation to the whole of our Northern Basin Advisory Committee.

MR O'FLAHERTY: I see. Right. Yes.

10

MR WISE: But there were two or three of us who had a – virtually a half-day session with him working through his report.

MR O'FLAHERTY: Right. And was the topic of the model's ability to model low flows discussed at that time.

15

MR WISE: Absolutely.

MR O'FLAHERTY: And what was his – did you raise a concern about the inability and was there a response back?

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MR WISE: My clear recollection is that he straight-out admitted that his model, or the modelling that he was aware of and knowing how he was a so-called expert modeller, he freely admitted that there was absolute limitation to the value of the model to low flows.

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MR O'FLAHERTY: You refer to a report. If the witness could be shown the Bewsher court reports folder, the report behind tab 6.

MR WISE: .....

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MR O'FLAHERTY: This is exhibit RCE130. Is that the report that you're referring to in paragraph 25?

MR WISE: That's – my recollection, that was the final report after we had had the opportunity to look at the interim reports.

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MR O'FLAHERTY: Yes. So you were given copies of drafts of this report, were you, throughout those discussions?

40

MR WISE: In the earlier one, the drafts.

MR O'FLAHERTY: Yes.

MR WISE: And I also recollect there was – he had all sorts of time constraints. My recollection was he was running out of his own personal time and the Authority wanted something in a hurry.

45

MR O'FLAHERTY: Yes.

MR WISE: And I got the impression there was a bit of frustration between – in all that and that was shared with us.

5

MR O'FLAHERTY: Right.

MR WISE: But I would be pretty confident this was the final report after we had had the opportunity to have input.

10

MR O'FLAHERTY: And you talk about the issue of low flows in the models reflecting that being consistent in this report. I might just to assist you in identifying where that might be discussed in this report. If I take to you page 18 of that report, the heading under 3.2.3 is entitled 'Deficiencies and Inaccuracies in Existing  
15 Models', and consistent with the theme that we've seen in some of these reports, Commissioner, this is another one of these instances in which Mr Bewsher has identified that it wasn't within his remit to review these models, but in any event he goes on to discuss known deficiencies and inaccuracies at the bottom of that page.

20 Moving over to the page 19, I've identified some discussion – well, reference to an earlier assessment, a 2010 assessment in the first of the lettered paragraphs, paragraphs A, talking about previous independent audit, cap models and water sharing plan models found that models were suitable for their intended use.

25 *These reviews also concluded that model performance is poor for periods of low flow.*

Is that the sort of reference you're talking about there?

30 MR WISE: You're really testing my knowledge.

MR O'FLAHERTY: No, that's fine. If you can't recall, you can't recall, that's fine.

35 MR WISE: It's probably better for me not to ..... because that's a pretty long shopping list that's there as well.

40 MR O'FLAHERTY: Yes. My impression from this was that there were significant deficiencies identified in this – well, identified in reports previous to this report and did you get any impression that – from – from your discussions with Mr Bewsher that any of those deficiencies were – had been addressed at that stage?

MR WISE: I really can't recollect.

MR O'FLAHERTY: Sure.

45

MR WISE: I'm sorry.

MR O'FLAHERTY: Was there any discussion – when you say in your statement that the modellers accepted the limitations of their models. Was there any discussion about how they had – whether they had planned to improve the models?

5 MR WISE: Not so much improve them but it was not infrequent that, you know, they would say that improvement probably won't make any difference or, you know, that we anticipate a greater degree of accuracy would probably not tell us anything different. It would be too much work to achieve a little gain and so, you know, that was more my thrust of - - -

10 MR O'FLAHERTY: Okay.

MR WISE: You know, we've got it all covered anyway, sort of response.

15 MR O'FLAHERTY: Right. So they were giving the impression that they didn't think that the issues required improvement of the models.

MR WISE: Well, they didn't think the Authority needed to know any greater improvement from them.

20 MR O'FLAHERTY: The next aspect of your statement talks about some – clarifies some of the documents attached to your submission. I'm just going to, in some of these, identify the documents so we know which ones we're talking about.

25 MR WISE: So we're finished with this one now?

MR O'FLAHERTY: You can put Mr Bewsher aside for the moment. I know we're loading you up with documents. I will try and avoid that as best I can. And so in your statement from paragraph 27 through to 33 under the heading 'documents attached to this submission', do you have that?

30

MR WISE: Sorry, what - - -

MR O'FLAHERTY: Sorry, in terms of behind tab 1 of your statement.

35

MR WISE: Under tab 1. All right.

MR O'FLAHERTY: Just trying to cross-reference some of these documents, that's all.

40

MR WISE: Yes.

MR O'FLAHERTY: So page 4 of your statement, paragraph 27.

45 MR WISE: Got it.

MR O'FLAHERTY: Excellent, you talk about a document entitled 'Draft Discussion Paper dated 13 April 2014'.

MR WISE: Right.

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MR O'FLAHERTY: I'm taking that to be the reference to the document behind tab 2(iv).

MR WISE: Yes.

10

MR O'FLAHERTY: That's the one?

MR WISE: Yes.

15 MR O'FLAHERTY: There's discussion of various components in a – under the heading 'Components of this Policy Review Table Could Include', and a number of dot points. The various points there, is this – do I take this to be a sort of early genesis of the discussion surrounding the toolbox measures? Is it sort of an early rendition of it?

20

MR WISE: Again, how all that was starting to evolve - - -

MR O'FLAHERTY: Yes.

25 MR WISE: - - - and so, you know, this component was obviously focussed more on policy sort of issues as distinct from, you know, some practical toolbox issues or whatever.

MR O'FLAHERTY: Right.

30

MR WISE: And yes, it was all early versions of the ultimate toolkit concept.

MR O'FLAHERTY: Yes.

35 MR WISE: And I guess also getting back to my very original, you know, paper back in February 2013 is what are the options to address the problem and, you know, in this case are they policy review options or in other cases something else.

40 MR O'FLAHERTY: This is where you refer to being open-minded in selecting potential options.

MR WISE: Yes.

45 MR O'FLAHERTY: You, in your – in the statement back on – behind tab 1 you – one of the – sorry, one of the – one of the matters you talk about is accuracy of gauges and data. In your statement you elaborate on that from an experience you had

when you were living in Bourke. That was when you were in the position of General Manager of the Shire Council, is it?

5 MR WISE: The particular example I think was you had two flows at different times.

MR O'FLAHERTY: Yes.

10 MR WISE: My experience with all that goes back to even when I was Regional Director of Land and Water Conservation.

MR O'FLAHERTY: Right. Yes, because you - - -

MR WISE: But I've used that example.

15 MR O'FLAHERTY: - - - talk about development of cap figures as well in the context of this. When you refer to that particular review of the – what you've referred to as conversion factors, those are the calculation taken to convert flow heights to a volumetric take.

20 MR WISE: Correct.

MR O'FLAHERTY: That's - - -

25 MR WISE: Yes, the other terminology is a rating table as the alternate terminology.

MR O'FLAHERTY: Right. Not to be confused with cap factors, very different. You refer to a review of those conversion factors and being – having a level of inaccuracy. Do you know if anything came out of that review? Was there any response, either policy or - - -

30

MR WISE: No.

MR O'FLAHERTY: - - - practical?

35 MR WISE: A broader question, it is standard practice for – or historically it has been standard practice for a sector of the departmental hydrologists and whoever to regularly review the rating between height and volume.

40 MR O'FLAHERTY: Yes.

MR WISE: And it ended up, there was one small team of people based up at Armidale I recall, somewhere up in the north-east anyway of New South Wales who were virtually responsible to be monitoring those and doing the review of the conversions, virtually all over the northern half of New South Wales. And a  
45 common means of them getting involved in a particular gauging station was if someone said we think there's something wrong with it.

MR O'FLAHERTY: Yes.

MR WISE: And, you know, another experience I had when I was at Bourke at a time when there's a very low flow going down the river, and the then Mayor of  
5 Bourke, who was not an irrigator but he was – had the greatest amount of knowledge of anyone on how the Barwon-Darling River system worked and he contacted this team of people and said there's something radically wrong with the gauge at Louth and so they went down and they recalibrated and my recollection they adjusted it by about 35 per cent, and - - -

10 MR O'FLAHERTY: That sounds like a fairly serious adjustment.

MR WISE: And the consequences of it, the flow was being rated but it was below the commenced pump height for, I think it might have been – I forget whether A and  
15 B class - - -

MR O'FLAHERTY: Sure.

MR WISE: - - - but it went from below the commenced pump height legal limit to  
20 above it so once it got amended, well, then legally the upstream irrigators could extract. Had they been extracting when it was measuring below, they were illegal.

MR O'FLAHERTY: So this was an adjustment upwards, it was underestimating the  
25 flow.

MR WISE: It was an upward adjustment.

MR O'FLAHERTY: Right.

30 MR WISE: And so the point I make is no, there's no – nothing changes except the entries that go into the long-term databases as to how much flow is going past at any point in time, and – and very simply if there's a variation of up to 35 per cent in a data, you know, input data, my own conclusion is that must flow through everything that that data ever gets used for whether - - -

35 MR O'FLAHERTY: It's a common statement by modellers themselves, I think, that a model is only as good as the data that's inputted. So if the data is itself inaccurate or cannot be considered as accurate, then the model is not much worse – not much worth it.

40 MR WISE: Could I share a few more minutes of time on that?

MR O'FLAHERTY: Sure.

45 MR WISE: A different paper that I haven't submitted to you.

MR O'FLAHERTY: Sure.

MR WISE: Somewhere here, somewhere. Too much rubbish. Way back in that February 2013 paper - - -

MR O'FLAHERTY: Sure.

5

MR WISE: - - - on the bottom of that somewhere I said I have a presentation I would like to share with the Authority.

MR O'FLAHERTY: Yes, you refer to a PowerPoint presentation.

10

MR WISE: A PowerPoint presentation. I've only got a hard copy of it but it's titled 'Why Use of Modelling Extractions for Annual Compliance is inappropriate'.

MR O'FLAHERTY: Right.

15

MR WISE: And it was in the context that at that stage modelling was used for compliance and, you know, I just walk through very simply how the system works.

MR O'FLAHERTY: Sure.

20

MR WISE: But jumping to the conclusion ..... it was a PowerPoint but there was pretty hard evidence at the time that gauge – the – the error in gauge readings – this is water gauges - - -

MR O'FLAHERTY: Yes.

25

MR WISE: - - - was up to 100 per cent. That's extraction gauges.

MR O'FLAHERTY: The error was up to 100 per cent?

30

MR WISE: Error up to 100 per cent.

MR O'FLAHERTY: Right.

MR WISE: The error in meters, what I have here, up to 30 per cent, so it might have been 30 per cent for the one down at Louth that I quoted.

35

MR O'FLAHERTY: Are these findings by the New South Wales Government?

MR WISE: I was using their information.

40

MR O'FLAHERTY: Yes. Okay.

MR WISE: Getting it from hydrologists or getting it from the meter readers or whatever. And so – and then there's no idea of the errors in any estimates such as overland flow or - - -

45

MR O'FLAHERTY: Because it's not being measured.

MR WISE: - - - other things. And so from all of that they were putting it all together. There's another example of where some model data had been used for  
5 auditing compared to real data and the difference there was the independent audit group who had done the modelling – model data, said that over a cumulative period of time in the Barwon-Darling they had extracted 54 gigalitres more than they should have.

10 MR O'FLAHERTY: You know, this is the audit for cap compliance.

MR WISE: The audit for cap compliance.

MR O'FLAHERTY: Under the agreement.  
15

MR WISE: Yes, independent audit group. Whereas licence holders, just measuring their actual extractions compared to their entitlements - - -

MR O'FLAHERTY: Yes.  
20

MR WISE: - - - said that they had a credit of 764 gigalitres.

MR O'FLAHERTY: Yes, okay.

25 MR WISE: So the actual things that they were working on is, if you like, the self-regulation - - -

MR O'FLAHERTY: Yes.

30 MR WISE: - - - they thought we're way in credit but the audit said you're 54 gigs behind. I guess my bottom line conclusion from all this was that – what did I say – poor data at face value for compliance without modelling is wrong. You should use modelling for unmeasured water and for future science and also fundamentally that  
35 poor data ends up giving poor policy. I've forgotten all the words that I've put together.

MR O'FLAHERTY: Yes, I think you repeated that line in several of your submissions, I think, yes.

40 MR WISE: And I got to present this PowerPoint to one of our Northern Basin Advisory Committee meetings I think about April 2014.

MR O'FLAHERTY: Right, yes.

45 MR WISE: And I made three recommendations, that NBAC – NBAC being our committee – recommend to the Authority that:

*Action be initiated to discuss with the independent audit group the limitations in the use of modelling for annual compliance audits for the Darling River system using the ..... Barwon-Darling River as an example.*

5 The second one, that:

*NBAC recommend to the Authority to seriously consider the ability of key stakeholders, including government agencies, in being able to maintain current reliable datasets to allow good science to be undertaken and to take appropriate strategic actions if poor datasets are inevitable.*

And the third one:

*NBAC recommends that the Authority critically analyse policies, procedures, practices and language used and make appropriate changes which may progressively empower and engage all stakeholders in achieving the objectives of the Basin Plan.*

So they are three recommendations I made and they went nowhere.

20

MR O'FLAHERTY: So is that, when you made that presentation to the Advisory Committee, were members of the MDBA - - -

MR WISE: Absolutely, yes.

25

MR O'FLAHERTY: Was there anyone from New South Wales Government or Queensland Government there as well?

MR WISE: I don't know but I would guarantee there would have been someone from the Queensland Government department because they virtually attended every one of our meetings. We had few people ever attend from New South Wales. Whether they happened to be there or not, I don't know.

30

MR O'FLAHERTY: Sure. Has – was there – that's fairly early on in the piece, you said April 2013 you were able to give that presentation.

35

MR WISE: April And I've been pleading with them since February that – I virtually put this together – well, in fact, I started putting this together before the Committee was formed.

40

MR O'FLAHERTY: Right.

MR WISE: Because I put it together while I was still General Manager at Bourke.

MR O'FLAHERTY: Yes. And did you get any feedback or response from the MDBA about these concerns?

45

MR WISE: Not effectively. That was just documented. I'm quite happy to table this document if you like.

5 MR O'FLAHERTY: Yes, we might actually. We will get copies sorted for that. Thank you.

MR WISE: 8 and 9 April 2013, I've got written on it was delivered to the Authority, or to NBAC and the Authority.

10 MR O'FLAHERTY: Yes. The next submission you refer to in your statement – sorry, we're just jumping around here – I might take you back to your statement behind tab 1.

MR WISE: Yes.

15

MR O'FLAHERTY: I'm now on page 5.

MR WISE: Right.

20 MR O'FLAHERTY: There's a reference to a document dated 18 February 2016. I think we may have – we have been to that one. That's behind tab 2(vii).

MR WISE: That's V17.

25 MR O'FLAHERTY: 2(vii).

MR WISE: 2V, right. Yes.

30 MR O'FLAHERTY: That should be a document which is Northern Basin Advisory Committee members report on members' issues.

MR WISE: Yes.

35 MR O'FLAHERTY: I will just see if I've got the same one. That one. Yes. Now we've been – we have discussed this one before. I just wanted to explore a bit more with you the critical – critically important recommendations by Geoff Wise, the point about the statistician.

MR WISE: Yes.

40

MR O'FLAHERTY: The point you're making there is that the only way to properly account or properly measure the variabilities is a matter of statistics, is that the point you're making there? If you could explain how that might assist and how that might interact with any models that might be used.

45

MR WISE: I think what I commented on earlier was that to my mind there was an opportunity, using a different aspect of good science, to give professional advices to

whether the way all the raw data on the highly variable northern flowing systems, whether it was being appropriately interpreted or whether the interpretation would lead to logical results or conclusions.

5 MR O'FLAHERTY: Right.

MR WISE: So it was really just feeling that – you know, I felt uncomfortable that highly variables – numbers can be used to end up with things like, you know, sustainable diversion limits - - -

10

MR O'FLAHERTY: Yes.

MR WISE: - - - over the long – you know, average long term or cap - - -

15 MR O'FLAHERTY: This is the problem with averages that we were discussing earlier today, yes.

MR WISE: The cap was also over long-term averages.

20 MR O'FLAHERTY: Yes.

MR WISE: And so I just felt it's nothing to hide by getting that independently assessed - - -

25 MR O'FLAHERTY: Yes.

MR WISE: - - - from a statistical point of view.

MR O'FLAHERTY: Did the MDBA provide any response to that suggestion?

30

MR WISE: No.

MR O'FLAHERTY: None at all? They didn't say we don't think it was a good idea or not?

35

MR WISE: I don't recall that they gave any comment. To my knowledge they certainly had no intention of taking any action on it.

MR O'FLAHERTY: Yes. The last document you refer to in your statement is at about meetings at Bourke and Brewarrina. I think that document is behind tab 2(xiv).

40

MR WISE: Yes, August 2016.

45 MR O'FLAHERTY: Yes, so that was – those were two meetings that the Committee had with the MDBA around August 2016.

MR WISE: .....

MR O'FLAHERTY: You make a number of recommendations and it seems like  
5 you were consistently calling for this, an analysis or review into the modelling of the  
Barwon-Darling model.

MR WISE: .....

MR O'FLAHERTY: That's behind, that's underneath the heading  
10 'Recommendations'. This being the middle of 2016, is this – do I understand it at  
this point in time, was it around this time that you became aware that the MDBA  
modelling at the time, or that was being used, did not incorporate the changes to the  
Water Sharing Plan that were made in 2012?

15 MR WISE: I think I knew that much earlier.

MR O'FLAHERTY: Okay.

MR WISE: I'm fairly certain, in fact, I would have thought the Bewsher document  
20 may have even acknowledged that.

MR O'FLAHERTY: Right.

MR WISE: I could be wrong but I have a feeling that he may have acknowledged it.  
25 Yes, I certainly was aware of it by then but I think it was a lot earlier.

MR O'FLAHERTY: Yes. And was this an issue that you raised as a concern with  
the MDBA modellers at the time?

30 MR WISE: Absolutely. Yes.

MR O'FLAHERTY: Did they explain to you why they didn't include those changes  
in their model?

35 MR WISE: The simple response was they were dependent on New South Wales to  
have done the work.

MR O'FLAHERTY: Right.

40 MR WISE: And New South Wales had been lagging in getting it done. And so they  
were – you know, the Authority, instead of taking any initiative themselves, are  
virtually waiting and then as knowing that this is very close to when the Authority  
make their final report and they virtually – I indicated that, you know, they did a  
couple of their own crude assessments and concluded that the modelling probably  
45 won't make any difference to the – to their recommendations.

MR O'FLAHERTY: Did they make any reference to – so one of the issues that the 2012 Plan raised was the lowering or lack of protection of low flows? That's right, isn't it?

5 MR WISE: One.

MR O'FLAHERTY: One of the issues.

MR WISE: Great access.

10

MR O'FLAHERTY: Yes.

MR WISE: Greater access and vast access.

15 MR O'FLAHERTY: Yes.

MR WISE: To extract the lower flows.

MR O'FLAHERTY: To those lower flows, yes. The – now, this time, the – at this stage, the possibility of the toolkit measures wasn't necessarily discussed, I imagine. That was later in the - - -

20

MR WISE: No, the toolkit measures were very definitely being put together.

25 MR O'FLAHERTY: Right. Yes.

MR WISE: Because well, the final recommendation from the Authority was I think in November 2016.

30 MR O'FLAHERTY: Yes.

MR WISE: So things were happening fairly fast in different quarters all through this period.

35 MR O'FLAHERTY: Yes. I might, if I – you're aware that Mr Peters made a submission to the MDBA following the production of that November 2016 report?

MR WISE: Of who, Mr Peters?

40 MR O'FLAHERTY: Mr Peters.

MR WISE: I wasn't aware of it. I virtually haven't spoken to him from the date of the last meeting until yesterday. Not surprised.

45 MR O'FLAHERTY: Sure.

MR WISE: And, well, in my own case, when there's an opportunity for public submissions, well I will put in a public submission.

MR O'FLAHERTY: Yes.

5

MR WISE: And I don't know whether that's when he put his in or some time different.

MR O'FLAHERTY: The reason I raise it is that this is one of the few times in which some of these concerns have been explicitly responded to. If I might – could the witness be shown Mr Peters' volume. I want to take you to the document behind tab 3 of this folder. Now, this is a response to the submission of Mr Peters in respect to some of the issues that he has raised as forming part of his submission.

15 MR WISE: Right.

MR O'FLAHERTY: If I could take you to page 2.

THE COMMISSIONER: Do we know who wrote this?

20

MR O'FLAHERTY: No is the short answer.

MR WISE: Page 2?

25 MR O'FLAHERTY: Page 2, the third row is what we've been discussing, the fact that the Barwon-Darling Water Sharing Plan, being the 2012 one, is not reflected in the modelling, and you will see that's the claim.

30 THE COMMISSIONER: What does it mean when it says that the version of the model used for the Northern Basin Review does not fully represent 2012 water sharing arrangements? Does it, in fact, mean that it doesn't represent them at all?

35 MR O'FLAHERTY: That would be my submission. I think they might be trying to cavil with the fact that insofar as the pre-2012 water sharing arrangements are the same as the post-2005, there's some reflection by accident, but that would be my submission that it doesn't reflect them at all in the sense that in order to reflect them at all they need to reflect them in their entirety.

40 THE COMMISSIONER: Is there – was there a deadline reason why the modelling was understood to be possible to be done badly?

MR O'FLAHERTY: Commissioner, you may recall in the 2013 review, there was a  
- - -

45 THE COMMISSIONER: I mean.

MR O'FLAHERTY: - - - time frame suggested about - - -

THE COMMISSIONER: Was there a deadline for the Northern Basin Review?

MR O'FLAHERTY: In terms of a deadline for the Northern Basin Review, I'm not aware of one. There was a – I think there's a reference in the section of the Basin  
5 plan which indicates that it was intended a review would be done at a certain time.

THE COMMISSIONER: Yes.

MR O'FLAHERTY: Now, I just can't for the life of me remember where that  
10 reference is. Section – chapter 6 somewhere, I think.

THE COMMISSIONER: I had ..... on that one.

MR O'FLAHERTY: Yes, 6.06(1) talks about reviews, and there's the note which  
15 says that:

*The Authority intends to conduct research and investigation by 2015.*

THE COMMISSIONER: So that's in the Plan. Sorry. You've lost me. Where is it  
20 in the Plan?

MR O'FLAHERTY: Section 6.06 - - -

THE COMMISSIONER: I'm sorry.  
25

MR O'FLAHERTY: - - - is a reference to an intent to conduct a review. Insofar as the Authority may consider an amendment of the sustainable diversion limit - - -

THE COMMISSIONER: You go to chapter 7 for that, don't you?  
30

MR O'FLAHERTY: That's under the SDL adjustment, but in terms of the – of an amendment to the Plan - - -

THE COMMISSIONER: Yes.  
35

MR O'FLAHERTY: - - - in section 47 of the Act.

THE COMMISSIONER: Right.

MR O'FLAHERTY: Actually section 45 of the Act, rather.  
40

THE COMMISSIONER: Go to the Act.

MR O'FLAHERTY: That's at large. That can be done at any time.  
45

THE COMMISSIONER: So there was no deadline then?

MR O'FLAHERTY: No statutorily imposed deadline, no.

5 THE COMMISSIONER: What I mean is, is it open for me to criticise the MDBA for relying upon what they call the relatively late delivery of the New South Wales 2012 Water Sharing Plan model rather than extending the time for them to do their work so that that model could be used?

10 MR O'FLAHERTY: I think it's very open, and I put that into context in the sense that a report which is dated January 2016 - - -

THE COMMISSIONER: Yes.

15 MR O'FLAHERTY: - - - which was quoted in the correspondence relating to Mr Fessey talks about the recent finalisation of an updated model. Now, that's as of January 2016.

THE COMMISSIONER: They say that that final version was received in April 2016.

20 MR O'FLAHERTY: Yes.

25 THE COMMISSIONER: I'm not quite sure why that doesn't mean it can be used. Do you know at all? It seems odd to me, but I'm a layman to all of this. Can you give me any insight into why it would be appropriate not to have incorporated a final version of a model received in April 2016 for an outcome that was, in fact, delivered in November 2016?

30 MR WISE: Your Honour, I thought that would be appropriate, but if that final report had major limitations anyway, or shortcomings, so – and so – and just in regard to your discussion about was there a deadline, our Committee was always told right from the beginning that our deadline would be the – virtually the end of 2016, that that's when the Authority had to make their recommendations. So I don't know where that's in writing.

35 THE COMMISSIONER: I must be missing something in the history. Is there something that meant that by the end of 2016 they had to make a recommendation?

40 MR O'FLAHERTY: Not ..... Commissioner, I don't think there's a statutorily imposed deadline. There may well be an administratively imposed deadline within MDBA.

THE COMMISSIONER: But that's self-inflicted.

45 MR O'FLAHERTY: That's self-inflicted, indeed.

THE COMMISSIONER: Was there – there was no ministerial direction.

MR O'FLAHERTY: Not to my understanding.

THE COMMISSIONER: They have to be because it - - -

5 MR O'FLAHERTY: Yes, and I recall that my last search for that indicated only one with respect to the more recent amendments.

THE COMMISSIONER: Yes.

10 MR O'FLAHERTY: Following the disallowance.

THE COMMISSIONER: Thank you.

15 MR O'FLAHERTY: So just on that response, there's a discussion about – this is the last paragraph:

20 *MDBA acknowledged that rule changes may have reduced the protection of low flows, but that this reduction will not be reflected in the Northern Basin Review modelling results. Is this one of the reasons that the MDBA has made the recommended recovery volume conditional upon the achievement of a set of toolkit measures including enhanced environmental flow protection?*

THE COMMISSIONER: Did that happen?

25 MR O'FLAHERTY: Pardon?

THE COMMISSIONER: Was the recommended recovery volume, that is, the reduction, in fact, made conditional in any sense of that word?

30 MR O'FLAHERTY: Well, the - - -

THE COMMISSIONER: For the achievement of a set of toolkit measures.

35 MR O'FLAHERTY: In my submission, no. The amendment to the Basin Plan doesn't make it conditional, and the Northern Basin Review report itself says on many – in multiple occasions that the implementation of those toolkit measures depends upon the States.

40 THE COMMISSIONER: That's why I asked you who wrote this because it's a fairly deplorable document, in my view. The word "achievement" there means something other than achievement, doesn't it? It really means conditional upon there being a set of toolkit measures which may or may not be achieved.

45 MR O'FLAHERTY: Yes.

THE COMMISSIONER: That borders on the intellectually dishonest, I would have thought.

MR O'FLAHERTY: Yes. Mr Wise, do you find that explanation to be a sufficient response to those concerns, from your point of view?

5 MR WISE: I just – I've had to write ministerials, I've had to use weasel words at times, and I think they mean something similar.

MR O'FLAHERTY: They sounds like weasel words to you, do they?

10 THE COMMISSIONER: Well, the fact of the matter is all weasel words are bad, and if they're in ministerials, they're worse, from the public's point of view. If you just concentrate on Counsel's question, I take it you think this is an unsatisfactory response.

15 MR WISE: Totally.

THE COMMISSIONER: Yes.

20 MR WISE: And if I can just touch on your previous comment, when this document came out, whatever it was, the Northern Basin Review document that was - - -

MR O'FLAHERTY: Yes.

25 MR WISE: - - - embargoed until 22 November '16 and a pretty little graph of all the changes from 390 to 320 plus toolkit, and I – since then, some time, I've communicated back to the CEO of the Authority saying that in my personal perspective on the Advisory Committee, knowing that the toolkit was very much linked to the Northern Basin Advisory Committee initiative, that I rejected my name being associated with – with us recommending in any way, shape or form that 320 plus toolkit equals 390.

30 THE COMMISSIONER: Yes. Well, that's the next thing I wanted to ask you. And I'm finding it really difficult to find the material where there is a scientific explanation or perhaps, to be more charitable, a scientifically-informed explanation for how you render the projected consequences of the so-called toolkit measures such as they were then known by a reduction of 70 gigalitres in the amount of water required to be recovered for the environment in the northern Basin, so as to comply with the ESLT requirement. Can you point me to where I would find that? I haven't found it yet.

40 MR WISE: I definitely can't. At the time this document was written, I have a firm belief that they hadn't even fleshed out their toolkits.

45 THE COMMISSIONER: We know that's true, don't we, because in their report they take up some examples which I gather they derive from your Committee's work, but they're called what I call generic examples.

MR WISE: Absolutely.

THE COMMISSIONER: They're ideas for what might be done, but as – they would all require individual projects, take, for example, Gwydir works to maximise the environmental impact of either the same or a reduced amount of water. That wasn't even back of the envelope. That was an idea, wasn't it?

5

MR WISE: I believe so and - - -

THE COMMISSIONER: You would have no idea at all how you could assign any numerically expressed contribution to a reduction in recovery amount on account of the Gwydir tragedy.

10

MR WISE: I personally believe they could not assign any of the co-called toolkit issues that they clung on to, any figure. And I don't believe that they explored them enough at that stage and I'm still not convinced that they've been properly worked through and some of the documentation is that it – they've all got to be worked through with the respective States and so I don't even know they've started any of that.

15

THE COMMISSIONER: The role of modelling in this seems to be that with all the imperfections, nonetheless modelling was relied upon by the Authority in promoting, as appears to have been the case, the 70 gegalitre reduction in recovery in the northern Basin, because the models didn't show any appreciable material or worthwhile difference between 390 or 320 which makes me ask, well, did they model 250 or 120 or 400, and if you weren't getting differences that mattered between obviously considerable differences in recovered water, call me old-fashioned but I would have thought that was an extremely robust way of demonstrating your model was no good. Isn't it? That is just common sense, isn't it?

20

25

MR WISE: You've said it clearer than I have. When they - - -

30

THE COMMISSIONER: A model's incapacity to differentiate in the environmental consequences for such a decrement of 70 gegalitres out of 390 suggests either that 390 is already rock bottom, which is logically possible, or that the model is inadequate to pick up what must be the serious effects of 70. It seems to me. Now, I have just not seen any material from the MDBA, including in response to yours – your queries that really grapple with those basic questions about using a model as a tool. Can you help me, have you seen anything?

35

MR WISE: I can only – I have not seen anything. When they shared with us a range of different models from I think 278 to 415, and they came up with the conclusion that there's not a lot of difference, my response – written response back to them was I'm not surprised and had you chopped it back to, I don't know whether I said 250 or 200 or 500, I said I don't think you will see any difference either.

40

THE COMMISSIONER: Well, that is the point I'm trying to make, that it's possible, I mean, logically I can entertain the proposition that there's not much

different environmental outcome at those amounts but only if you accepted what I hope is the theoretically pessimistic view that everything is already so terrible at 415 it makes no real difference if you halve it. I can't believe that's true. That doesn't make sense with anything I know about ecology.

5

MR WISE: All right.

THE COMMISSIONER: The alternative is obviously enough that the model is no good.

10

MR WISE: Correct.

THE COMMISSIONER: I don't mean slightly defective. I mean no good because it's not picking up differences that are on any view of it likely to be in some way or another material.

15

MR WISE: If I can reiterate what I said very early in this interview or whatever it's called.

20

THE COMMISSIONER: Conversation.

MR WISE: My opinion from very early is modelling is the wrong tool to be using and simply a long-term sustainable limit is not going to – also is not going to achieve the original intent of why we've got a Basin Plan.

25

THE COMMISSIONER: That's why I asked you earlier before the break about EWRs, it seems to me that they're what is at the heart of the restoring and protecting of the biodiversity which is the treaty obligation, and you expressed them in terms which may ultimately be translatable, however crudely, to some hydrology but, as you say, the hydrology doesn't achieve them without much more.

30

MR WISE: That's right. And, again, I think this graph in this document – this graph here, you know, they've got all the modelling lines being very close together and parallel, but it's forgetting that this river is now flowing 50 per cent lower than it was before development and it more or less – so the issue is what are the things that are impacted up here, not how modelling is going to make any difference.

35

THE COMMISSIONER: Now, first of all, I just want – this is an important thing, I think, for my overall report. If as I'm likely to do, I see the international obligation enacted in this country by the Commonwealth Parliament as involving restoring and protecting what they call the biodiversity, then I guess we start with the legislated fact I told you about before in subsection 21(4), namely that there has been, to use the jargon, over-allocation in such a way as to degrade the biodiversity, threaten it. So the Act then uses this other central concept of a level of take beyond which there would be compromise of those, I will call them environmental values.

45

Because it's very difficult to study a very large material phenomenon like the Murray-Darling Basin, huge in physical extent, massively, amazingly variable in its behaviour and dynamic in all sorts of ways, I can understand why hydrology has been a place where modellers have for generations now done a lot of work, and no  
5 doubt been very useful. I don't – I'm not trying to scorn their discipline. But surely if it's all about restoring and protecting, the first thing you decide is you don't do that by modelling an outcome that you have restored and protected. You use the modelling no doubt to devise the methods you adopt to restore and protect.

10 But then after an appropriate period of effort and expenditure, by way of what might be called an audit, you find out whether it has worked. And you can't do that by applying another model. You actually have to send the ecologists out there to count frogs or whatever it would be more than counting frogs, but ideally they're literally counting frogs, which no doubt involves itself some modelling but of a kind which is  
15 far more fine-grained than the models that you were involved in with the Northern Basin Review. Now, if that's true, doesn't that mean that we are setting ourselves up now for the risk that when some audit is done, it will be found that we spent a lot of money and haven't achieved the environmental outcomes, which means we have to start again?

20 MR WISE: Absolutely. My conclusion, which is in – I've shared with the Authority back towards the end of the '16 era, is that the achievements for the Basin Plan for the northern system will be having some increased security of assets and rights for large irrigators who – and the assets increased if they've taken opportunity  
25 for the infrastructure gains, and in those – the areas where that has happened, there's probably going to be a decrease in employment because the efficiency gains no doubt will impact on employment.

30 THE COMMISSIONER: Now, as I understand it, that's a good thing according to the MDBA; is that right? I mean that seriously. I think that's a pointed inquiry. I take it the MDBA regards the job losses to come with mechanisation and larger-scale irrigation are good things?

35 MR WISE: No, I haven't heard them express an - - -

THE COMMISSIONER: Does it follow from what they're saying that they're paying for these things to be done at public expense because that is thought to be in the public interest?

40 MR WISE: Well, it's a double standard if they are saying that because - - -

THE COMMISSIONER: I think it is a double standard, you will gather.

45 MR WISE: The justification for the 390 back to the 320 was predominantly because a few jobs might be lost in a couple of towns.

THE COMMISSIONER: Let me make it crystal clear, not for the first time. I think there is a severe intellectual disjunction in the way, and policy disjunction in the way the MDBA treats the job losses produced from large-scale mechanisation and irrigation enhancement, compared with job losses from a reduction in irrigated  
5 acreage and I am at a loss of being able to understand why the latter stops something from happening but not the former.

MR WISE: Well, another way - - -

10 THE COMMISSIONER: The logic, of course, would end up that we would get rid of internal combustion tractors and have large horse teams to plough but we're not going to do that because that's regarded as silly. Which rather suggests that it might be silly to resist any improvements of efficiency or propriety, by which I mean environmental acceptability, simply because they will reduce jobs, I think?

15

MR WISE: I totally agree with what you're saying, and - - -

THE COMMISSIONER: I mean, you wouldn't want to reduce the crime rate on that reasoning because it would reduce the need for police and prison warders, which  
20 is just ridiculous.

MR WISE: The fact that throughout the whole process there's no consideration of the significant efficiency gains that have already happened in the cotton industry, which is fundamentally the irrigation industry of the northern Basin.  
25

THE COMMISSIONER: Of which they are proud justifiably, I would have thought.

MR WISE: Absolutely. To my mind, that's a credit to them with their - - -

30 THE COMMISSIONER: But it involves job losses, is my point.

MR WISE: What's that?

THE COMMISSIONER: It involves job losses.  
35

MR WISE: Massive. The cotton - - -

THE COMMISSIONER: Again, of which they are proud.

40 MR WISE: The manager at one of the big cotton complexes at Bourke, when I was out there, was quietly bemoaning the fact that his company was just changing from module bales to round bales. He said for every 10 jobs we used to have we will only have two and he had trouble as a manager and a committed local resident in going down that path.

45

THE COMMISSIONER: Quite. But I mean, once you decide that efficiency measured in that fashion is a hallmark of success, then you have got this double

standard or this intellectual disjunction when you say I applaud you for doing that, indeed I give you a tax deduction for the expenditures involved in achieving that, but I'm going to put a bar in relation to environmental controls on irrigation if it can be seen that jobs might be lost. It seems odd to me, I have to say. And I gather from  
5 your shaking of your head that - - -

MR WISE: I totally agree with you, that the extension, my conclusion of what the Basin Plan is going to deliver was a dead Darling for the majority of the time except for the odd big flood.  
10

THE COMMISSIONER: Yes.

MR WISE: And - - -

15 THE COMMISSIONER: Which turns it into a kind of a stormwater channel.

MR WISE: And still with communities and individual different interest groups all arguing with each other, irrigators upstream arguing with irrigators downstream because the downstream ones can potentially use the environmental water that  
20 they've let go and, you know, I think it's a - the three or four word sentence at the end, I won't be proud of my involvement because that's literally how it's seen, and I can't understand why if someone was a bit effective, they wouldn't say, you know, let's abort the Basin Plan in the northern Basin at this stage before we waste any more dollars for no - no gain for the original intent.

25 THE COMMISSIONER: Yes.

MR O'FLAHERTY: And my final query is you mentioned a review, a scientific review back in the '90s, the Thoms' review.  
30

MR WISE: Correct.

MR O'FLAHERTY: Could the witness be shown, I think we've dug up a copy of that.  
35

MR WISE: Thank you. I haven't seen this or read it for 20 years.

MR O'FLAHERTY: No, it's a historic document but that's the review you're referring to, is it.  
40

MR WISE: Yes.

MR O'FLAHERTY: And I just - I don't want to take you through this in any level of great detail but - and it's fortunately one of those documents which have a very helpful executive summary. If you turn over the page, it's in landscape form but  
45 there should be on page 7 a list of recommendations.

MR WISE: Right.

MR O'FLAHERTY: Do you have that?

5 MR WISE: Yes.

MR O'FLAHERTY: There's a recommendation for an immediate moratorium on additional abstractions.

10 MR WISE: Right.

MR O'FLAHERTY: Then there's a recommendation for a development of a low flow model.

15 THE COMMISSIONER: Just remind me when was this '96, was it?

MR O'FLAHERTY: 1996, yes.

THE COMMISSIONER: It's been a long fuse, that one, hasn't it?

20

MR WISE: Commissioned by the New South Wales Government.

MR O'FLAHERTY: That's effectively.

25 THE COMMISSIONER: That's where they still have money, apparently. Yes.

MR O'FLAHERTY: Effectively, the same recommendation you've been making 20 years later.

30 THE COMMISSIONER: That's right, isn't it, Mr O'Flaherty? This doesn't seem to have been either rejected or acted on? Nobody said what a silly idea to get more information, but they've not actually done it.

35 MR O'FLAHERTY: Well, I haven't seen any suggestion like that. This document  
- - -

THE COMMISSIONER: Sorry, you're right. No one has publicly said what a silly idea to get more information.

40 MR O'FLAHERTY: It – having skim read this, to some extent, this document is in the context of the recently developed IQQM model, so my understanding is the IQQM model, or at least the iteration of it was at least first developed around this time in the '90s. Is that consistent with your understanding, Mr Wise?

45 MR WISE: No idea.

MR O'FLAHERTY: That's fine.

MR WISE: It was developed for the regulator of rivers in the southern Basin.

MR O'FLAHERTY: Yes.

5 MR WISE: And then they started trying to adapt it to an - - -

MR O'FLAHERTY: Trying to apply it upstream.

10 MR WISE: - - - unregulated – and that - - -

THE COMMISSIONER: If I look at page 6, first dot point, those are statements which were still, in effect, being made, weren't they, at the time of the Northern Basin Review in 2016?

15 MR WISE: Yes.

MR O'FLAHERTY: It's the same model in the sense that it's the same base model. It may well have been, I might use the word loosely, improved.

20 THE COMMISSIONER: What needs to be drawn to attention is the fact that - - -

MR WISE: Less reliable.

25 THE COMMISSIONER: - - - these scientists thought that the improvement of that was an urgent requirement, see page 7, second dot point.

MR O'FLAHERTY: Indeed, this is an urgent requirement for developing future management procedures. The other point - - -

30 THE COMMISSIONER: We're operating in geological time apparently.

MR O'FLAHERTY: The other dot point that caught my eye – well, the next dot point talks about adaptive management which seems very similar to the concerns you were raising in terms of your event flow strategies, is that - - -  
35

THE COMMISSIONER: Do you see the reference in the third dot point on page 7 the decision support system ..... these expressions? Do you see that? The DSS, page 7, third dot point.

40 MR WISE: Right.

THE COMMISSIONER: Is that, it doesn't use this expression, but if you look at the flexible options of preserving maximum ..... each flow event, based on prevailing ecological and other conditions, etcetera, that is adaptive management as the note in  
45 square brackets indicates, is that right? Sort of or not? Can you .....

MR WISE: I believe so. Yes. I - - -

THE COMMISSIONER: Is that how you understand it?

MR WISE: Yes. I guess I understand it again getting back to managing individual flow events.

5

THE COMMISSIONER: The onus of – the force of what they say in those square brackets, that note, I would translate this way, I think, be no use doing this if you can't tell what's going on.

10 MR WISE: If you don't monitor it.

THE COMMISSIONER: Yes, which is basically empirical science, surely.

15 MR O'FLAHERTY: The final point that I wanted to touch on in this document is the next dot point.

*In the interim, there should be no abstraction of water for irrigation purposes below the natural 80th percentile flow calculated from monthly flow duration curves.*

That's protection of low flows in a very simple phrase.

20

MR WISE: I would have to go further into the document.

MR O'FLAHERTY: Sure.

25 MR WISE: Because I'm sure there's somewhere in the document where they make reference to no – no abstraction for any commercial use below 500 megs a day at Bourke, but I thought in that same section somewhere they may have said no abstractions for broadacre irrigation, I thought, below the 60 percentile flow which translated to the 820 megalitres a day at Bourke.

30

THE COMMISSIONER: Thanks.

MR WISE: And so I'm not sure whether my 60 was wrong and it should have been 80, or whether they've got an 80 and a 60.

35

THE COMMISSIONER: No. We understand. Thanks.

MR O'FLAHERTY: That concludes the set of questions I had of you, Mr Wise. Was there any other matters that you wanted to raise? Sorry, before I go to that, I tender the report entitled 'Scientific Panel Assessment of Environmental Flows for the Barwon-Darling River by TOMS et al dated May 1996'. And Mr Wise, is there any other matters that you wanted to raise for the Commissioner's attention? I know you could probably spend several days raising these issues, but was there anything in particular you wanted to - - -

45

MR WISE: Could I, given that you've just given me this submission, the scientific panel, can I refer you back to the top sentence, or top paragraph, dot point on page 6.

THE COMMISSIONER: Yes. That was the one I was drawing to attention earlier.

MR WISE: Where the current flow simulation model, the IQQM which is the  
5 model, describes flows above 10,000 megalitres a day accurately, but is less reliable  
below this level.

MR O'FLAHERTY: That hasn't changed.

10 THE COMMISSIONER: That was the thing I drew your attention, having been  
printed in 1996 but being repeated in 2016.

MR WISE: And I wasn't even necessarily looking at flows below 10,000 megalitres  
a day as being, modelling being unreliable, but virtually, the same model, and we've  
15 been told 22 years ago that it's not reliable. And we keep using it and keep making  
decisions from it.

MR O'FLAHERTY: Yes.

20 THE COMMISSIONER: It does seem to me that that is a point worthy of your  
emphasis. Yes, thank you.

MR WISE: So, and I didn't know that was there.

25 THE COMMISSIONER: Yes. There's an expression in the Act which obliges the  
MDBA to proceed upon the basis of the best available science, but it raises in my  
mind this question: "do you really comply with that by noting that a model is  
inadequate, but saying it's the best we've got and just continue to use it, or do you  
not, in order to use the best available science, have to do things like constantly  
30 recalibrate and improving models"? I would have thought the latter. I would be  
interested to know your point on that.

MR WISE: ..... it depends on your conscience and your commitment to the task.

35 THE COMMISSIONER: You mean - - -

MR WISE: Yes. My conscience.

40 THE COMMISSIONER: If you're in good faith and serious, you will do something  
to fix your model, you mean.

MR WISE: Yes, it's easy to do a bit extra if you feel so inclined, and that's why I  
45 tried to throw in a few of those left field things like a statistical analysis and, you  
know, I've had a couple of other examples of what I think are very poor science and,  
you know, I just, again, getting back to this document which is the thing that was  
released to justify it.

THE COMMISSIONER: Yes. Quite.

MR WISE: That graph basically shows the different tributaries contribute different volumes to the Barwon-Darling and yet both in the original Basin Plan before the review, and after the review, they're saying whatever the shared reduction is to the Barwon-Darling, we will accept whatever tributary it comes from, treating a  
5 megalitre for a megalitre, treating them all equally, and we will let the States decide between themselves and in their own respective valleys which they come from.

THE COMMISSIONER: The Northern Basin Review was engendered by an awareness that the scientific understanding for the northern Basin was considerably  
10 less than the equivalent study in the south; wasn't that right?

MR WISE: That was the theory, yes.

THE COMMISSIONER: Which makes it all the more piquant that they didn't set  
15 about improving their methods and research.

MR WISE: And so, to my mind, that's just extremely simple that if one tributary does not deliver much water to the Barwon-Darling, maybe because that's not a Macquarie ..... wetland or whatever, or whatever, why did they then allow upstream  
20 in that tributary any environmental water that has been acquired through efficiency or buyback to be attributed to the shared reduction of the Barwon-Darling because they've admitted it won't get there, and so - - -

THE COMMISSIONER: Yes. So this is really the converse of connectivity,  
25 whereas connectivity in the larger sense, you do need to understand to what extent and in what sense and sometimes for how long and how much they're connected.

MR WISE: And so it's just simple logic. It's not even science, and so I guess that's where I said earlier, I believe the Authority just got so lost in the wood for the trees,  
30 they're on a single mission, there's no lateral thinking, and – and the – and then they got overtaken by what I believe is a change part way through.

THE COMMISSIONER: What change was that?

MR WISE: Where the decision was not about swinging the pendulum back for  
35 environmental – to address some of the environmental issues. It was about swinging the pendulum back provided there's no loss of jobs and no impact on the upstream community and again, you know, when I look at that map and I've got a different way of expressing it, which I'm quite happy to table, it's the same map, but I just  
40 simply put a pin at Bourke and did a radius of how far the – the Darling River is down to Menindee, compared to how far it goes upstream, or if I had done a different one, how far from Bourke to Wentworth, it would have encompassed the equivalent of the entire northern Basin.

45 THE COMMISSIONER: Yes.

MR WISE: Not one bit of socio-economic configuration was done downstream of Bourke. All the work was done upstream.

5 THE COMMISSIONER: Well, to be fair, which I don't entirely mean seriously, I confess, the statement by, on behalf of the, or by the anonymous writer for the MDBA was that those socio-economic impacts were inferred from the hydrology which I think is a way of saying we could see there was less water.

10 MR O'FLAHERTY: But not much less.

THE COMMISSIONER: And we assumed there was some effect on the community, but that was – that is, I agree with you that seems to be the extent of it.

15 MR WISE: And the extension in this great big port, they didn't even acknowledge that section of the river downstream of Bourke and yet, you know, in the picture.

THE COMMISSIONER: And you mean Bourke to the northern edges of Menindee. Yes.

20 MR WISE: Bourke to Menindee. It's effectively not even shown on their map, and I told them that at our last meeting, probably the meeting that this was tabled.

THE COMMISSIONER: Did they have an explanation for that?

25 MR WISE: Well, it was too late because it was embargoed until 9 o'clock the next morning.

30 THE COMMISSIONER: Apart from a spurious deadline did they have any intellectual justification for not paying regard to that breach?

MR WISE: I think they were in the batten down the hatches mode. Now, we've made our decision, and we don't want to talk about it. That's how I interpret it anyway. And – and it's – and even then it gets back to, you know, the priority of rights for water, things like basic – basic rights for landholders and town water  
35 supplies and cultural rights, whatever. None of that got evaluated at all, socially, economically, environmentally, anywhere downstream of Bourke, and yet there's just as much – probably more river distance because the river's got a few more bends in it downstream of Bourke than it does upstream.

40 There's a longer geographical area there, totally ignored, irrespective of ignoring the people downstream of Menindee who were still only dependent on water from upstream. And to my mind, you know, that was pretty disappointing that, you know, the sole focus was talking to irrigators and irrigator communities and how do we minimise the impact on them, or how do we placate them. So anyway, I just thought  
45 I would share that with you, for what it's worth. That distance factor and – and whilst there mightn't be a lot of people, that's no justification, in my mind, not to treat them all balanced.

So no, I guess concluding comments, thanks for the opportunity. I didn't come with any great ..... but it's my – my disappointment that I think our Committee genuinely, or most of us anyway, at least most of us. I can't speak on behalf of everyone. We went in with genuine intent of – of what the purpose of the Basin Plan was, and I  
5 always used to say, just swing the pendulum back. It has gone a bit too far. I didn't have a target.

I just thought it can come back. And yet, you know, the language changed. In fact, I even questioned whether the meaning of sustainable in SDL effectively changed.  
10 When – when it all first started I thought “sustainable” meant very definitely sustainable from an environmental point of view. By the end of it, I really think the focus was as much as anything on sustainable irrigation communities or sustainable irrigation businesses. And, you know, I think Mal Peters virtually implied something similar, he might not have used the same words.

15 But in – when I reflect on what the purpose of the Basin Plan was I still can't see any reason for it to continue in spending more money in the northern Basin, going down a pathway which is going to make no effective difference to the environment. And equally I get back to the natural river. To my mind, the natural river has been  
20 ignored and, you know, its history goes back to 60,000 years with the Aboriginal communities. So – and, you know, I don't think anyone in society wants, you know, one of Australia's major rivers to end up like some of the ones that we've heard of in overseas countries where there has been a lack of addressing the balance between triple bottom line.

25 And so – and, you know, I say in my career I've been privileged to have worked for the Department of Agriculture for 30-odd years which is very much about promoting productivity and working for 11 years with land and water conservation and land administration which is more on the environmental side, five years out at Bourke  
30 very much on the social side, you know, a lot of social issues in Bourke. And I don't think many people have been – had that privilege to – to have been employed and having to make decisions and hard decisions and responsible ones across all aspects of triple bottom line, and, you know, on the side I've been involved in – you know, I was on the Chair of the precursor to the Regional Development Australia for the  
35 Orana region and then political change and they changed, it used to be called the Area Consultative Committee and I Chaired that and then they swung over to RDA, Regional Development Australia and I was offered the Deputy Chair job and it coincided with going to Bourke and I got out of it.

40 So it's not as though I'm anti-development or anti-everything but I – I am disappointed that, you know, the – the goals that were aimed to be achieved, not much progress is going to be made, but again, I – I believe the Authority should have woken up to that fact a lot earlier, that their only way to have achieved what they wanted should have been to be working much more cooperatively and possibly  
45 assertively with the States because the States hold all the – all the tools that the Authority need to deliver their outcome. So, again, I get back, you know, my simple focus is for that connection between the north and the south. Anything possible to

improve the – the – the consistency of flows, to shorten the intervals between flows and to lengthen individual flows that should be the goal to get towards where they want to go. Thank you for the time.

5 THE COMMISSIONER: Thank you very much for your assistance, I'm much obliged. Thank you. We're finished?

10 <THE WITNESS WITHDREW [3.19 pm]

MR O'FLAHERTY: Mr Bagley.

15 THE COMMISSIONER: Yes. Mr O'Flaherty.

MR O'FLAHERTY: Yes.

THE COMMISSIONER: Do you need to adjourn?

20 MR O'FLAHERTY: No, Mr Bagley is waiting very patiently in the front of the gallery and so I'm ready to - - -

THE COMMISSIONER: We will send you a copy. What do I need?

25 MR O'FLAHERTY: So as I said, waiting very, very patiently, is Mr Chris Bagley.

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

30 <CHRISTOPHER LEO BAGLEY, SWORN [3.21 pm]

<EXAMINATION-IN-CHIEF BY MR O'FLAHERTY

35 THE COMMISSIONER: Please sit down, Mr Bagley. Thank you for your patience.

40 MR O'FLAHERTY: Yes, Mr Bagley, thank you for waiting. Now, Mr Bagley, you've provided a submission to the Royal Commission. You should have that in the folder in front of you, behind tab 1.

MR BAGLEY: Yes, I do.

45 MR O'FLAHERTY: Yes. I've got a few specific questions that I wanted to explore with you relating to your submission but first I just wanted to just explore some more general topics with you, if that's all right.

MR BAGLEY: Yes.

MR O'FLAHERTY: Now, you're a dryland farmer just outside Milang on – my  
5 understanding are, that's over in the north-west corner of Lake Alexandrina, is that  
- - -

MR BAGLEY: That's correct.

MR O'FLAHERTY: And your crops are mainly cereals, wheat and barley and a  
10 few other things, is that right?

MR BAGLEY: That's correct.

MR O'FLAHERTY: Is it mainly dryland farming round that area or there are –  
15 that's – if you go - - -

MR BAGLEY: Mainly dryland farming.

MR O'FLAHERTY: Yes.  
20

MR BAGLEY: With extensive vineyards around Langhorne Creek.

MR O'FLAHERTY: I was going to say if you go further into Langhorne Creek  
25 that's when you get into the more irrigated vineyards around there.

MR BAGLEY: Yes, and again, in Currency Creek.

MR O'FLAHERTY: Yes.

30 THE COMMISSIONER: And is it your experience that you crop every year?

MR BAGLEY: Yes.

MR O'FLAHERTY: Now, you're a member, I understand, on a body called the  
35 Consumer Advisory Panel.

MR BAGLEY: Community Advisory Panel.

MR O'FLAHERTY: Sorry, I'm getting my acronyms messed up, sorry.  
40 Community Advisory Panel. And when was that first established?

MR BAGLEY: 2011 from memory.

MR O'FLAHERTY: Right. And was that a State Government – South Australian  
45 State Government body or was it a Commonwealth body or was it a bit of both?

MR BAGLEY: As I understand it, it is directed by State Government Department of Environment and Water and it was required by the Federal Government to give community input and oversight to the drought recoveries expenditure from around that period until 2016.

5

MR O'FLAHERTY: I see. So - - -

MR BAGLEY: And after 2016 when that federal money had been spent, DEW, if I can call it that, decided to continue with the panel because it thought that it brought value to DEW's operations and it's now funded by DEW.

10

MR O'FLAHERTY: Just to turn to explore the, I suppose the purposes, it was originally set up as a – do I understand that to be essentially a condition of federal funding for various State projects, that the State set up a body like this.

15

MR BAGLEY: Yes.

MR O'FLAHERTY: To provide community consultation.

MR BAGLEY: To provide communication from the community to the Authority.

20

MR O'FLAHERTY: Sure. Okay. And what were some of the projects or initiatives that were the subject of that Commonwealth funding?

MR BAGLEY: Plantings round the lakes which at that stage were originally were very dry, fencing to keep stock out of the lakes, support for community recovery projects and that again included a lot of plantings.

25

MR O'FLAHERTY: Yes.

30

MR BAGLEY: From memory that would cover most of the funds.

MR O'FLAHERTY: And was there recovery or drought mitigation projects prior to this panel being set up?

35

MR BAGLEY: Yes, there had been.

MR O'FLAHERTY: My understanding is there were some – there's infrastructure built around the Lower Lakes and also proposed to be built during the height of the Millennium Drought.

40

MR BAGLEY: Yes, the most notable in our area was the, prior to the drought, many of the vineyards pumped from Lake Alexandrina and a pipeline was established and those vineyards are now serviced by a pipeline that runs directly from the river channel.

45

MR O'FLAHERTY: And that's the pipeline that goes up from around ..... , isn't it?

MR BAGLEY: Yes, through Langhorne Creek out to Currency Creek.

MR O'FLAHERTY: One particular project which I understand drew a bit of  
community concern was the proposal to build a weir at the entrance of the river into  
5 Alexandrina around Wellington.

MR BAGLEY: That proposal from the South Australian Government caused  
significant community distress.

10 MR BAGLEY: Yes, and amongst other things, I was involved as a foundation  
committee member for the River Lakes and Coorong Action Group.

MR O'FLAHERTY: Yes.

15 MR BAGLEY: A group which I think has made a submission to your Commission.

MR O'FLAHERTY: Yes. Yes. So what were the – leaving aside the legal and  
international concerns, what were the core concerns raised by the community about  
that sort of project?

20

MR BAGLEY: We – the involved people judged that that was the end of the river  
system and that the Coorong would be lost.

MR O'FLAHERTY: Yes.

25

MR BAGLEY: And that we would never recover, that thereafter demands from  
irrigation would grow.

MR O'FLAHERTY: Yes.

30

MR BAGLEY: And effectively water would go beyond Wellington only in flood  
conditions.

MR O'FLAHERTY: Turning to – then to the Community Advisory Panel itself,  
35 when it was first established in around 2011, who makes up the panel? Who's on  
that panel? Yourself being one of them.

MR BAGLEY: Agency representatives. Typically at a meeting, which are held bi-  
monthly, we have a variety of community members such as myself.

40

MR O'FLAHERTY: Yes.

MR BAGLEY: Representing communities from around the lakes, basically from  
Menindee to Goolwa, representatives of the Department of Environment and Water  
45 and similarly representatives from the Commonwealth Water Holder's office,  
Murray-Darling Basin Authority, occasional representatives from other interstate  
agencies and researchers from a, what's called a Scientific Advisory Group to DEW

and twice a year we have a combined meeting with that group and ourselves, and the last such meeting was last Thursday.

5 MR O'FLAHERTY: Yes. I want to just explore that particular meeting. The – at some – at some points I don't think I'm glossing over that. The – as far as the members of the panel, do I take it that the government representatives were there not necessarily as members of the panel but in terms of people who engage with the panel in terms of presentations, or - - -

10 MR BAGLEY: In the latter.

MR O'FLAHERTY: Yes.

15 MR BAGLEY: It would be as public servants responding to the community.

MR O'FLAHERTY: Yes. And was the, in terms of the South Australian Government representatives, were they there each of the meetings?

20 MR BAGLEY: Yes.

MR O'FLAHERTY: How about the Commonwealth Environmental Water Holder and the MDBA, are they present at each of these meetings?

25 MR BAGLEY: There may be one in which the Authority was not represented.

MR O'FLAHERTY: Right.

30 MR BAGLEY: I think the Commonwealth Environmental Water Holder has been represented ever since the office was established.

MR O'FLAHERTY: Okay. And how often does the Advisory Panel meet?

MR BAGLEY: Bi-monthly.

35 MR O'FLAHERTY: Right. And so it was originally set up as part of the consultation project for the projects that were federally funded, and you said that that program ended in 2016.

40 MR BAGLEY: From memory, yes.

MR O'FLAHERTY: Roundabouts.

MR BAGLEY: Yes.

45 MR O'FLAHERTY: What's the core functions of the – well, core work of the panel now? What matters are raised at meetings from 2016 onwards?

MR BAGLEY: The issue that has taken the greatest time would probably be barrage management.

MR O'FLAHERTY: Sure.

5

MR BAGLEY: Which has changed dramatically in that period, and I think the changes have to a considerable extent been driven from CAP, if I can call it CAP.

10 THE COMMISSIONER: Can you explain that to me a bit please, the barrage management and being driven by changes to CAP?

MR BAGLEY: Personal opinion but I think - - -

15 THE COMMISSIONER: Yes. No. Your views.

MR BAGLEY: It's pretty much straight on, prior to the Millennium Drought, barrage management consisted of opening up the gates when we had plenty of water and closing them when we were short of water because of - - -

20 THE COMMISSIONER: This was to – in principle, was to retain a certain head between the lake and the ocean; is that right?

MR BAGLEY: That's correct. Most activity was centred on Goolwa because it was cheaper to get staff there when barrages, when the gates had to be lifted or dropped.  
25 So most of the water that went to the Mouth originated in Goolwa. So I've describe barrage operations now, the key gates have been automated. They can be directed from an office efficiently without sending out work teams. Probably more water is released from Tauwitchere on the eastern side of the barrages, then Goolwa. The reason for that is if we want to get fresh water to penetrate the Coorong in any way,  
30 it has to come from Tauwitchere because if it comes from Goolwa.

MR O'FLAHERTY: That's the gates that are closest to the Coorong so that water feeds directly into the Coorong.

35 MR BAGLEY: Yes, and won't get past the Mouth.

MR O'FLAHERTY: So - - -

40 THE COMMISSIONER: But at Goolwa, the influence of the Mouth will take that increased fresh water without an impressionable amount going into the Coorong.

MR BAGLEY: As a generalisation, yes. I believe many of those changes have been affected by interactions with CAP.

45 THE COMMISSIONER: That's what I would like you to elaborate. Just explain that to me please.

MR BAGLEY: One of the most active members of CAP is Gary Hera-Singh, a fisher from Meningee, who has been on the water all his life. His family has fished the Coorong I think for about a century. He brings a lot of practical knowledge, interaction of tides, winds, movement and spawning of fish, and what I have been  
5 party to, his interaction with research scientists has been invaluable because they draw upon abstract knowledge which often lacks that type of practical knowledge, put the two together and we have a very productive working relationship. And that in turn has affected the operation of the barrages. Gary and others, not Gary alone, but - - -

10 THE COMMISSIONER: How should I understand the main difference in the operation of the barrages from Goolwa to Tauwichee? As a focus, I understand that. What other changes have there been?

15 MR BAGLEY: The automation of the gates.

THE COMMISSIONER: And automation, yes.

MR BAGLEY: Because we're in a very - - -  
20

THE COMMISSIONER: Means you can manipulate them more often.

MR BAGLEY: And respond to weather conditions.

25 MR O'FLAHERTY: And quicker.

MR BAGLEY: Yes, westerly blows in, you do one thing, and if the tides are high, you do another.

30 THE COMMISSIONER: Can you generalise? Does that mean that more or less water is released? If you can't generalise, don't.

MR BAGLEY: I can't generalise because we're governed by the amount of water available.  
35

MR O'FLAHERTY: In that respect, is that where the interaction with probably most importantly the CEW, the Commonwealth Environmental Water Holder, is important at these meetings, where there's that coordination of flows down the river into the lake system and the barrage operations? Is that - - -  
40

MR BAGLEY: That's absolutely critical.

MR O'FLAHERTY: Yes.

45 MR BAGLEY: Perhaps I can illustrate best by two projects which have taken place in 2017/18. One is to try even pulse water between the two lakes, Albert and Alexandrina. The reason for that is Albert went hypersaline during the drought, and

we haven't been able to restore the natural balance between the two lakes. So what CEW has been trying to do is drop Alex for a little while, try and pull water out of Albert and pulse water down. Now, from memory water from the Hume might take 50 days to reach Alexandrina. So you can understand the coordination that's  
5 required to shepherd that water, to be there at the right time and to bring it down when the wind's against, you will get much less of the benefit than when the wind is with you.

So I hope it's one example that is intelligible. Another was Black Bream Recovery  
10 Project. I think about last October, scientists from ASATI with advice from Gary Hera-Singh arranged so that there was a flow at the key time when that species of fish spawns. So, again, we had to deliver water there, and on last Thursday's meeting, the scientists are very pleased with the results that that's a particular species that was under threat, and there have been good numbers of what they call young on  
15 year fish.

MR O'FLAHERTY: Sure. With the issue of Lake Albert, what is sometimes raised in addressing the salinity issues is a connective between Lake Albert and the Coorong. Is that something that has been discussed at CAP meetings?  
20

MR BAGLEY: Quite often, we built a causeway between the two lakes, I think in the 1940s and that, of course, has interfered with the natural passage of water between the two.

25 MR O'FLAHERTY: Yes, between Alexandrina and Albert.

MR BAGLEY: The narrows.

MR O'FLAHERTY: Yes.  
30

MR BAGLEY: And, in turn, that has affected the vegetation particularly on the Albert side. So now, it is very difficult to get water in or out of Albert. At the moment, we would like to get more out because .....

35 THE COMMISSIONER: I know I should know this. I've forgotten. Is the causeway effectively a weir, or not so complete.

MR BAGLEY: Half a weir.

40 THE COMMISSIONER: So what's wrong with reconfiguring the causeway?

MR BAGLEY: As I understand it, primarily cost. We've got a roadway where in times past there would have been no roadway so we can look at it perhaps as half a weir. If we were able to go under and just put concrete culverts under that roadway,  
45 I think we would ameliorate the situation. To the best of my knowledge, it's simply a cost issue.

THE COMMISSIONER: It's just a project of civil engineering.

MR BAGLEY: On my understanding, yes.

MR O'FLAHERTY: Has that particular topic been discussed at CAP in terms of the, can we see whether this is possible, as a project?

5

MR BAGLEY: Not in detail.

MR O'FLAHERTY: No.

10 MR BAGLEY: The relevant issue that has received most attention in CAP is that of the connector from Albert to the Coorong.

MR O'FLAHERTY: Right.

15 MR BAGLEY: The idea being we can exchange water between those two bodies of water, empty Albert which will then fill from Alexandrina and restore - - -

THE COMMISSIONER: Just remind me, that connector would be completely artificial, wouldn't it?

20

MR BAGLEY: Completely, yes.

THE COMMISSIONER: And would it be in – on territory outside the Basin?

25 MR BAGLEY: No.

THE COMMISSIONER: Right. You made a point in your statement that perhaps the understanding of the territory of the Basin needs to be expanded somewhat.

30 MR BAGLEY: Yes, I did, but I was referring to much further down the Coorong which is 140K.

THE COMMISSIONER: So what is the status presently of thinking from a Basin Plan point of view about this connector?

35

MR BAGLEY: The answer is no. I think the two main objections are cultural from the Ngarrindjeri who don't like it and some scientific reservations about the impact in the Coorong.

40 THE COMMISSIONER: Right. So that leaves – so that was an expedient being considered to address the hyper-salinity of Albert.

MR BAGLEY: Yes, and our response has been the pulsing of the lakes which has had some effect. I understand the differential of salinity between the two lakes now has been reduced to about half of what obtained before the – the drought.

45

THE COMMISSIONER: I hope that's by way of decreasing the salinity in Albert, rather than increasing .....

MR BAGLEY: It is. It's all fine at Milang.

5

MR O'FLAHERTY: You mentioned that – the concerns of the Ngarrindjeri. Do they have a representative on CAP?

MR BAGLEY: Yes, currently it's Ken Sumner, the CEO of the Ngarrindjeri Regional Authority. So - - -

10

MR O'FLAHERTY: So there's – in some of the submissions that have been made to this Commission, there has been a suggestion that there has been a need for improving the barrages and making them more – making them – well, automated or more automated. I take it from your description of the barrages that they are currently automated and there's – is there any need for improvement, from your point of view?

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MR BAGLEY: Sorry, I can't give you the – the gate numbers but a small proportion of the gates have been automated.

20

MR O'FLAHERTY: Right.

MR BAGLEY: When pressed from CAP to SA Water or to the Authority to .....

25

MR O'FLAHERTY: Yes.

MR BAGLEY: The response from SA Water who are also now represented on CAP is that little would be gained. That the key – the pivotal gates are now automated.

30

MR O'FLAHERTY: Right.

MR BAGLEY: Not much is to be gained by extending that automation program. I was surprised to hear that, but they have been consistent on that issue.

35

MR O'FLAHERTY: Okay. And you haven't seen anything to the contrary that would cause you to doubt that assessment, have you?

MR BAGLEY: No, I haven't.

40

MR O'FLAHERTY: The other – one other issue I wanted to just explore with you with respect to the CAP is the SDL adjustment projects and in particular the south-east flows restoration project. Is that a project that is discussed at these CAP meetings?

45

MR BAGLEY: Yes. The project made a particular effort to attend CAP meetings through the course of it.

MR O'FLAHERTY: Yes.

5

MR BAGLEY: I would recall as approximately 18 months.

MR O'FLAHERTY: Right.

10 MR BAGLEY: To keep us up to date, and they achieved that very well.

MR O'FLAHERTY: And as far as I understand it, the – and this is going to massively oversimplify what is proposed, and my understanding is it's essentially restoring – well, taking a step back, prior to the South-east Drainage Schemes, there was some flow or seepage from the south-east into the Coorong.

15

MR BAGLEY: Yes.

MR O'FLAHERTY: And that has been artificially altered through the Drainage Schemes that were implemented in order to assist in agricultural production in that area?

20

MR BAGLEY: Yes.

25 THE COMMISSIONER: So this is draining swampy land, is it?

MR BAGLEY: Yes, with drains that were built earlier 20th century.

30

THE COMMISSIONER: Where was the outflow of those drains?

MR BAGLEY: A number of drains straight into the ocean.

THE COMMISSIONER: Right.

35 MR BAGLEY: The northernmost relevant to this discussion is Blackford drain.

THE COMMISSIONER: And so the fact is that that is water which in nature would have percolated relatively diffusely into the lake.

40 MR BAGLEY: Into the south lagoon of the lake, on my understanding.

THE COMMISSIONER: And now is in a more concentrated fashion bypassing the lagoon and going into the ocean.

45 MR BAGLEY: No, I'm sorry. The – under natural conditions, there was a lot of water lying on the ground in the south-east, on flat terrain, some of this it, the

northernmost part of it percolated into the south lagoon, either directly in streams or through groundwater. We built the drains, sending the water out to the ocean.

5 THE COMMISSIONER: Where it was once percolating diffusely into the lagoon, it is now concentrated and flowing straight into the ocean.

MR BAGLEY: That's correct, and the purpose of the south-east restoration flows program is to take some of that water from the Blackford Drain so that we can send it up to the south lagoon.

10 THE COMMISSIONER: Forgive my ignorance. Ideologically, why can't all of it go that way?

MR BAGLEY: I – I don't know what proportion of all the water in the southeast did reach the - - -

THE COMMISSIONER: The ocean.

MR BAGLEY: - - - the south lagoon.

20 THE COMMISSIONER: I see. Yes. Now, I understand.

MR BAGLEY: One of the points of my submission is that I believe that our definition of the Basin should be extended to answer that question.

25 THE COMMISSIONER: That's why – I was noticing that, yes. Yes.

MR O'FLAHERTY: Yes, because it - - -

30 THE COMMISSIONER: It's a bit difficult to see – if you take connectivity as being important, which I do, it's a bit difficult to see how you could exclude that part of the hydrology, isn't it?

MR BAGLEY: It puzzles me.

35 THE COMMISSIONER: Yes. Have you got explanations historically or politically why that's so?

MR BAGLEY: I think it's to clear land. Farmers in the southeast could see an opportunity to have more productive land.

40 THE COMMISSIONER: No, I don't mean the draining. No, that's how – that's why humans have drained it forever, but, no, why that - - -

45 MR BAGLEY: Restoration.

THE COMMISSIONER: - - - part of the land is left out of the Basin Plan?

- MR BAGLEY: I – in my personal experience, when I’ve talked about this with fellow members of CAP and others – and I might be being unfair to people when I say that – the response has basically been, “Shh, be quiet. The Victorians might hear you”, because most of the water flows across the border from Victoria. It’s relatively  
5 saline, much less saline, of course, than the south lagoon. South Australia has controlled it for over a century, and the fear, the level of lay people is that it may be useful to us, and what we don’t want is for the Victorians to find out that it’s useful, that it originates on their land, and they might stop it flowing across the border.
- 10 THE COMMISSIONER: If I can generalise terribly, my experience with the Victorians is that they already know that.
- MR BAGLEY: I agree.
- 15 MR O’FLAHERTY: And I think that ship has sailed. We’ve got submissions to that extent, yes - - -
- MR BAGLEY: Yes, I’m not surprised.
- 20 MR O’FLAHERTY: - - - which is why I’m raising it. All right.
- THE COMMISSIONER: Apart from that – apart from keeping it secret from the Victorians, are you aware of any other reason why it would not be part of the hydrological whole that ought to be regarded?  
25
- MR BAGLEY: Any scientific reason? I am not aware of any other reason.
- THE COMMISSIONER: Okay. Thanks.
- 30 MR O’FLAHERTY: Now, you said that the consultation, or at least the involvement of the CAP of the restoration project has been going on around about 18 months.
- MR BAGLEY: Approximately - - -  
35
- MR O’FLAHERTY: Yes.
- MR BAGLEY: - - - and I believe I’m correct in saying that the project finished on budget and on time at the end of June this year.  
40
- MR O’FLAHERTY: Okay. In terms of the level of information and involvement, did you have any concerns about the detail of information that you were provided by the government representatives?
- 45 MR BAGLEY: On the contrary, I think they did an outstanding job. Anecdotally, land-holders in the southeast are a pretty feisty lot. That project could have brought

on world war 3. The project managers made a great effort to keep community involvement - - -

MR O'FLAHERTY: Yes.

5

MR BAGLEY: - - - productive, and good communication flows and their representations at CAP, I believe, were part of that.

MR O'FLAHERTY: And this was the – because their land was being – a pipeline  
10 was being built on their land so that they needed to - - -

MR BAGLEY: Not a pipeline; basically, a drain.

MR O'FLAHERTY: So it's a – is it a canal, is it?

15

MR BAGLEY: It's open. It's – yes.

MR O'FLAHERTY: Right.

20 MR BAGLEY: Sorry.

MR O'FLAHERTY: So they needed to be on board in order for that to occur.

MR BAGLEY: Yes.

25

MR O'FLAHERTY: Yes.

MR BAGLEY: Quite often it would run through the middle of a property - - -

30 MR O'FLAHERTY: Yes.

MR BAGLEY: - - - and, of course, access was provided, but any property owner could have made life very difficult in such conditions.

35 MR O'FLAHERTY: Yes. In terms of the nature of these projects, and I won't – I don't need to get into the detail of it, but one of the key aspects of these sorts of projects is that there is equivalent environmental outcomes achieved as a result of these projects. Was there much in the way of discussion at CAP meetings in respect of the ecology of the south lagoon and the effect that this project might have on it?

40

MR BAGLEY: Yes, there was. I can only characterise it from my point of view.

MR O'FLAHERTY: Yes.

45 MR BAGLEY: On one hand, there was positive anticipation that we may have found a tool with which we can restore the south lagoon.

MR O'FLAHERTY: Yes.

MR BAGLEY: The south lagoon has been in distress since the Mouth closed in 1981. It's very difficult to offer fresh water assistance from Tauwitchere because the  
5 water has to travel 120, 130 kilometres.

MR O'FLAHERTY: Yes. Especially when you're dealing with not as – when you're dealing with relatively small amounts of water - - -

10 MR BAGLEY: Yes, and - - -

MR O'FLAHERTY: - - - coming down from Tauwitchere, as well.

MR BAGLEY: Yes, the – you want to have enough water to play with. Also, salinity is at its worst in spring and summer, when we have prevailing south-easterlies - - -  
15

MR O'FLAHERTY: Yes.

MR BAGLEY: - - - along that coastline and the Coorong just heads south-easterly, so it has been characterised as trying to send water uphill - - -  
20

MR O'FLAHERTY: Yes.

MR BAGLEY: - - - and that's a fair assessment. So the attraction of being able to introduce fresh water from the south appeals to lay people like me. I note in your submissions that David Paton has objected strongly. He believes that algal blooms have resulted from flows from the southeast waters. I know that Mike Geddes, another respected scientist, I think, believes otherwise.  
25  
30

MR O'FLAHERTY: Right.

MR BAGLEY: I'm not able to assess the two.

35 MR O'FLAHERTY: Sure.

MR BAGLEY: I would hope that we're on the right track and that we have this tool. We need that sort of scientific discussion to make sure that we don't worsen the situation.  
40

MR O'FLAHERTY: Yes. You mentioned a Scientific Advisory Group. And that you met, I think, last Thursday, did you say - - -

MR BAGLEY: Yes.

45 MR O'FLAHERTY: - - - with them. Is that – who – do you know who – and I'm not expecting you to list names, but is Professor Paton on that Advisory Group?

MR BAGLEY: No, he's not.

MR O'FLAHERTY: Is there an equivalent – I understand his specialty is largely migratory birds. Is there a migratory bird specialist on that panel?

5

MR BAGLEY: No, not - - -

MR O'FLAHERTY: Not to your knowledge, no.

10 MR BAGLEY: None has presented to our combined meetings.

MR O'FLAHERTY: Okay. What was the – so have you – has the CAP had any meetings with this Scientific Advisory Group in relation to the Southeast Flows project itself, or has it been more broader discussions than that?

15

MR BAGLEY: Greater, more broader discussions.

MR O'FLAHERTY: Right.

20 MR BAGLEY: We had a Coorong Summit, not specifically for those groups. It was a larger summit meeting - - -

MR O'FLAHERTY: Sure.

25 MR BAGLEY: - - - I think in early July.

MR O'FLAHERTY: Yes.

30 MR BAGLEY: And that included a workshop and the minutes and results of that Coorong Summit are in the hands of the local minister and we were advised last Thursday that they will be released shortly.

MR O'FLAHERTY: Right.

35 MR BAGLEY: I recall Mike Geddes presented at that summit.

MR O'FLAHERTY: Okay.

MR BAGLEY: David Paton may have been there. He didn't present.

40

MR O'FLAHERTY: Okay. Okay. Now, you mentioned you were a member of the River Lakes in Coorong Action Group, a founding member.

MR BAGLEY: I'm not a – not a member now.

45

MR O'FLAHERTY: Right.

MR BAGLEY: I was a member for the first six or seven years of the group's existence.

5 MR O'FLAHERTY: Sure. Have you been a member of any other organisations or committees around the area?

10 MR BAGLEY: Yes. I was on the board of the Goolwa to Wellington Local Action Planning Group for approximately seven or eight years. I'm a member of the Friends of the Point Sturt Landcare Reserve and now I'm a committee member of the Milang Agricultural Bureau.

15 MR O'FLAHERTY: And are these – what's the sort of – the broad functions and activities of those groups? Are they – any particular projects that spring to mind that you would like to refer to?

MR BAGLEY: Yes, I refer to the reserve that originated from the Millennium Drought - - -

20 MR O'FLAHERTY: Yes.

MR BAGLEY: - - - where we found a lack of historical memory. People were talking about the lakes as they used to be, and they went back as far as, say, my boyhood. We talk about how we used to jump off the Milang jetty. There was little understanding that the lakes, as we knew them, had already been significantly degraded since settlement.

MR O'FLAHERTY: Yes.

30 MR BAGLEY: And we could only refer to writing – writings and some paintings and some early photographs to see what the landscape had looked like. So the reserve is an attempt to restore indigenous plantings on a piece of the council reserve land which runs from Point Sturt Road down to the lake shore, and it presents a contrast. Directly alongside it is grazing land, and what we want is future generations to look at what existed, at least at points of – Point Sturt pre-settlement - - -

MR O'FLAHERTY: Yes.

40 MR BAGLEY: - - - and see the contrast with post-settlement, and, therefore, have an idea of the impact of agriculture on our district.

45 MR O'FLAHERTY: Yes. You make the point that a lot of people's memories are in the context of irrigation being part of that context. We have – there are some suggestions, which is akin to what we were just discussing before about the blocking off the lakes at – around Wellington and, essentially, getting rid of the barrages such that the lakes – lower lakes become, essentially, a saltwater system. I imagine from your perspective that's not something you would have any level of support for?

MR BAGLEY: I would – I would be horrified by the thought.

MR O’FLAHERTY: Yes.

5 MR BAGLEY: I’m at a loss. A fellow and respected member of CAP would probably see that as a reasonable course of action and certainly judge that our use of water during the drought was not as wise as it could have been. I don’t understand his reasoning. The Mouth is blocked by incoming sand when water levels are low. I am assured that even a 1956 flood would have not cleared the Mouth, as it would  
10 have been blocked in the Millennium Drought.

MR O’FLAHERTY: Yes.

15 MR BAGLEY: So this idea that we could put in the Wellington weir and just have salt water in the lakes for a period of time confuses me because we wouldn’t. We would simply have a continuous sand bar from Port Elliot down to the south-east.

MR O’FLAHERTY: Yes.

20 MR BAGLEY: We would just have a swamp. We wouldn’t have a lake.

MR O’FLAHERTY: Now, in your submission, you refer to a principle that we’ve discussed quite at length, the precautionary principle, and you draw the example of the acid sulphate soils only being essentially discovered midway through the  
25 Millennium Drought. I take it that prior to – I think you put a point to a time in 2007, there was very, very – there just wasn’t any understanding about the effect of drying those lake beds and the – increasing acid sulphate.

30 MR BAGLEY: In my experience, there was none. I refer to a meeting of what was then called the Lower Murray River Drought Reference Group chaired by the ex-premier, Dean Brown.

MR O’FLAHERTY: Yes.

35 MR BAGLEY: And I’ve forgotten the name of the scientist, Rob. You’ve probably got it there.

MR O’FLAHERTY: Sorry. Rob – Dr Rob Fitzpatrick?

40 MR BAGLEY: Yes. Yes.

MR O’FLAHERTY: Yes. Sorry, yes.

45 MR BAGLEY: I’m sorry. I recall Dean Brown as unexpectedly including Dr Fitzpatrick on an agenda for that drought group, and that was the first mention I had encountered of acid sulphate soils. Given that I’ve been involved in that and other groups concerned with the drought, I think it’s fair to say that that’s the point at

which we first – Australia first became aware of the acid sulphate soils problem. I hope I'm correct in making that assertion.

5 MR O'FLAHERTY: Now, my understanding is that that becomes a significant issue when the lakes themselves dry out, and it's not as prevalent an issue or concerning an issue when there is water in the lakes.

10 MR BAGLEY: Yes, it's an issue that arises when land that has been consistently covered with water - - -

MR O'FLAHERTY: Yes.

15 MR BAGLEY: - - - is exposed, so it's not an issue, say, on an established lake edge where it dries and wets, depending on the season. So in the Millennium Drought we had areas of lake bed and river bed right throughout the system that had never or for thousands of years had never been exposed to air.

20 MR O'FLAHERTY: Yes. And you see that as more than just a concern for that particular issue, but you see that as symptomatic of broader concerns that you have that we're not looking into these areas as extensively as we should. You call that as an example of not applying the precautionary principle?

25 MR BAGLEY: I see that as an example of what I consider how much we have to learn about the ecology of this system.

MR O'FLAHERTY: Yes.

30 MR BAGLEY: I'm a layperson. I can't address with length some of the controversies, but I look at some of the issues on which we have uncertainty and I refer to the adaptive management claims made for the Plan, and you can't adapt, that is, respond to a situation which has spiralled out of your control. I can – acid sulphate soils, the closure of the Mouth, we're supposed to be dredging only five per cent of the time. We've been dredging 24/7 for most of this year, comparatively benign conditions, the recovery of South Lagoon, the condition of Lake Albert. We were told a year ago that we discovered a virus that could clean up all the European Carp in the system. Next meeting of CAP somebody asked us what's going to happen to the dead fish.

40 Millions of – and there is no answer so that's an example where on one hand we've got a solution. On the other hand we're told you will have the greatest black water event in the history of the world. To me that is a society that has much to learn, and to take our management of the system and push the envelope, always trying to win as much consumptive water as we can, maybe run a bit skinny for the environment that seems to me very unwise. We need a bit of humility - - -

45 MR O'FLAHERTY: Yes.

MR BAGLEY: - - - to appreciate how little we know and if we push this system too far, we won't be able to recover.

5 MR O'FLAHERTY: In terms of your understanding of the management practices of the barrages in respect of keeping the Mouth open, am I right in saying that the key, if not the only thing that can ensure that Mouth be open is flow through the barrages?

10 MR BAGLEY: Flow through the barrages and removal of what is now called Bird Island. That's a build-up of sand just within the Mouth that originated before '81 and has continued to grow - - -

MR O'FLAHERTY: Yes.

15 MR BAGLEY: - - - even during the high flows at the end of the drought. All that the water does is grab a bit of the sand at the top. It doesn't affect the base of such – what I call Bird Island. It's - - -

20 MR BAGLEY: That's essentially a sand bar, is that between the barrage at Goolwa and the mouth, there's that sand bar that - - -

MR BAGLEY: From memory most of it is on the eastern side, if you like, Tauwitchere and the Mouth.

25 MR O'FLAHERTY: Okay. Right.

MR BAGLEY: But the effect of it is the same.

30 MR O'FLAHERTY: And so the attempts to flush water from Goolwa to – through the Mouth is hampered by the sediment being deposited at Bird Island. Is that the core concern?

35 MR BAGLEY: The core concern for me is the Plan claims – claims that if we can keep up a flow of two gigs a day the Mouth will be kept open. I can look no further than this year to say that's not the case. And it's probable that perhaps most of our modelling hasn't allowed for that sand build-up.

MR O'FLAHERTY: Right.

40 MR BAGLEY: And until we can remove that sand I don't see how we can return the mouth to its normal operating environment.

45 MR O'FLAHERTY: So you can say from first hand that the attempts to get that 2,000 megalitres a day hasn't been sufficient from your own firsthand knowledge?

MR BAGLEY: Yes, I can.

MR O'FLAHERTY: The other point that you – another point you make is in respect of salinity. We've – we have heard how the impact on salinity affects irrigation communities. What – I was wondering if you could just explain how the impact – how salinity impacts, say, on dryland farming such as your own operation?

5

MR BAGLEY: Well, luckily we're not aware of any great impact on our farm. I certainly know that in the township at Milang traditionally, most of the properties had a bore.

10 MR O'FLAHERTY: Yes.

MR BAGLEY: Which would service the household. None of those bores operate now because the water table has risen. The underground water is too salty.

15 MR O'FLAHERTY: Right.

MR BAGLEY: So perhaps that's an example of rising salinity.

MR O'FLAHERTY: In terms of it becoming an even greater problem is there – do you understand that there might be knock-on effects to the soil quality as that water table rises? I know that may not be, you've just said that's not something you've experienced personally but is that a concern that you're aware of?

20

MR BAGLEY: It's an issue on which I carry considerable concern.

25

MR O'FLAHERTY: Yes.

MR BAGLEY: Most people, certainly most cereal farmers are aware of land loss in WA in the eighties and the nineties to rising salinity. At a – at a presentation to CAP in 2012 from Peter Forward whose – I think his job title was Senior Engineer, Salt Interception for SA Water, he described some of the challenges of his job and some of the achievements, and advised that within the Basin itself we're carrying a deposit of 140,000 million tonnes of salt. Now, that's one of those figures that's hard to get one's head around. But to me it's a sleeping giant.

30

35

MR O'FLAHERTY: Yes.

MR BAGLEY: And the last thing we want to do is wake it up.

MR O'FLAHERTY: And you refer to the salt export target of two million tonnes annually. Now, my understanding of the point that you make in respect of that is what that two million tonnes export target does is merely address the status quo.

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MR BAGLEY: Yes. Approximately the same amount comes in on rainfall on an average year, falls on the Basin, so that maintains an equilibrium if we can keep it up. On my – when I last looked at the Authority's website, the last three reporting

45

years for salt export out the Mouth is an average of 0.8 million tonnes, less than half of our target.

MR O'FLAHERTY: Right. Okay.

5

MR BAGLEY: In 15/16 it was down to .56 and the subject is treated without any alarm. I see that figure and I'm quite alarmed. Again, why are we lacking such knowledge that we can say we can get two million tonnes out of the Mouth provided we keep it open, either naturally or mechanically. And within the first three years of  
10 scrutiny, we're less than half that. And does that mean that there is a salt accumulation somewhere in the system or our measurements are invalid, I don't know, but given my concern about the underlying deposits in the system, I see that – this is a first order issue for management of the Basin. Before the drought, what was then the Darling Commission, generated a report called the '1999 Salinity Audit' and  
15 that calculated that in this century our salt export load would double because of the effects of irrigation. The subject seems to be a lost – have been lost in the emergency of the drought.

MR O'FLAHERTY: Yes.

20

MR BAGLEY: I am concerned that it's not being given sufficient activity. When we interrogated Peter Forward and referred to Authority documentation, their focus is upon salinity level at Morgan. If that can be kept to 800EC, she will be right, everything's hunky-dory. That seems too simplistic, too small a measurement tool to  
25 say that, okay, if the salt mobilisation does increase, then we will just lift our interception schemes. Interception schemes just pull the water out, park it somewhere, and leave it for future generations to look after. I think the issue needs greater attention to that. I would be very pleased if this Commission's report requests from the Authority that they release salt mobilisation reports annually or on  
30 a five year basis.

Just let us know that salt is on the move, let us know if particular crops are more or less beneficial than other crops. Just keep us informed to keep our eyes on that particular ball because if that salt deposit gets on the move, then all our other  
35 problems will disappear.

THE COMMISSIONER: In South Australia, is there assistance, professional scientific assistance available to landowners, farmers, concerning choice of planting and mode of husbandry to mitigate the mobilising of ancient salt?

40

MR BAGLEY: I can't answer yes or no. I would be surprised if the Department of Agriculture along the river doesn't have that expertise and would make it available to any landowner.

45 THE COMMISSIONER: As I understand the position, at least in some places, the mobilising of ancient salt is probably in large part due to a wide-scale sudden change

in the vegetation from vegetation which used more of the water before it got to the greater depths, to vegetation that doesn't use as much of the water.

MR BAGLEY: Yes.

5

THE COMMISSIONER: I don't want to put you in the gun as a dryland grazier but I mean, one obvious example is pasture grass more or less alone instead of maybe grasses and trees. I think that's part of the current understanding – part of the problem?

10

MR BAGLEY: That certainly fits my understanding. A deep-rooted plant reaches down and pulls up as much water as it can. We replace it with shallow-rooted plants and as - - -

15

THE COMMISSIONER: It's also not just a matter of pulling water up. It's also a matter of using all the water that's soaking in.

MR BAGLEY: That's right. And then on a wet year the shallow-rooted plants don't use all that water.

20

THE COMMISSIONER: That's right.

MR BAGLEY: So the water table rises. That's my layperson experience.

25

THE COMMISSIONER: Is that something – can a farmer and grazier access that kind of expertise?

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MR BAGLEY: I'm sure that they can. If we had a salinity problem in Milang, in the Milang Agricultural Bureau, we would call first upon the Department of Agriculture to tell us what's going on and how to manage it, but I haven't had direct experience of such an exchange, so I can't guarantee that the expertise is available.

35

THE COMMISSIONER: I don't know whether it's still the case with improved techniques but as I understand it another way that it was thought that ancient salts were being mobilised was irrigation.

MR BAGLEY: That's the only – well, that's the primary mover that I am aware of, is irrigation.

40

THE COMMISSIONER: Probably the primary mover is what happens even if we're not here, but it goes out the river.

MR BAGLEY: Yes. What goes into - - -

45

THE COMMISSIONER: I mean, there's constant movement of salt naturally.

MR BAGLEY: Yes. That's where I understand that the river naturally moves two million tonnes a year.

5 THE COMMISSIONER: That brings me I think to the fourth of the mechanisms, if you reduce the discharge, reduce the flow, then you're going to reduce its transport capacity.

MR BAGLEY: Absolutely.

10 THE COMMISSIONER: Which is your point about, in your evidence, casts a curious light on the language of waste to describe river water that goes out to sea.

MR BAGLEY: Yes, I – there is a certain mentality that can look at the Mouth and look at every litre that runs to the ocean and say that's – that's good water wasted.  
15 Not only does the water give life and biodiversity throughout the – its entire course but it also gives us that waste discharge.

THE COMMISSIONER: I don't want to demonise salt which is an older part of the earth than we are, but from our point of view the river is necessary to remove a toxin.  
20

MR BAGLEY: Yes.

THE COMMISSIONER: Thank you.

25 MR O'FLAHERTY: And Commissioner, to give that salt export target a – some context, that's an objective called the salt export objective in section 9.09.

THE COMMISSIONER: Yes.

30 MR O'FLAHERTY: - - - of the Basin Plan.

THE COMMISSIONER: And it's integral, as I understand it. The Basin Plan has to deal with it.

35 MR O'FLAHERTY: It's an explicit objective that is expected to be achieved by the discharge of an average of two million tonnes of salt.

THE COMMISSIONER: So Mr Bagley asks, I would have thought not unreasonably, well, if it's expected to be achieved ..... asked to be told how we're  
40 going from time to time, I think

MR BAGLEY: Indeed. Yes. And - - -

THE COMMISSIONER: Is that right?  
45

MR BAGLEY: My point is that they've told us they've only achieved .8 of a million.

THE COMMISSIONER: That's a reason to be told.

MR O'FLAHERTY: Yes, Mr Bagley refers to in his submission, the salinity order of 1999. Now, that's a Basin-wide order which is quite extensive in its detail.

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THE COMMISSIONER: I've read it.

MR O'FLAHERTY: There is further documentation which is not before the Commission yet, which is in respect of the Basin Salinity Management Strategy.

10

THE COMMISSIONER: Right.

MR O'FLAHERTY: Which, as Mr Bagley points out, is largely, if not – well, yes .... largely devoted to that level of salinity at Morgan, and there are annual reports which I think is what you were referring to in respect of the reporting of how they're going towards that two million tonnes per year target, and that's where you're saying one year it was about .5, one was .8.

15

MR BAGLEY: Yes. That's the only reporting that we have.

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MR O'FLAHERTY: Yes.

MR BAGLEY: The monthly River Murray report reports salinity at various points along the river stream including Milang.

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MR O'FLAHERTY: Right.

MR BAGLEY: But they're only telling us what's in the river, rather than the only regular reporting that I'm aware of what goes out the Mouth is that which I've referred to which is published on their website.

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MR O'FLAHERTY: Yes.

THE COMMISSIONER: That's a well-made point. Thank you.

35

MR O'FLAHERTY: That's what I had to cover from your submission, Mr Bagley. Is there any aspects that you want to raise to bring the – to the attention of the Commissioner that we haven't discussed this afternoon?

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MR BAGLEY: No. I can offer a few impressionistic comments.

THE COMMISSIONER: Please do.

MR BAGLEY: My wife and I spent our working lives up in the city. I picked up the newspaper in 1981 to find that the Mouth had closed, and I thought, well, this is good news because by the time we get back to the farm that will have been – that problem will have been fixed. Obviously been pulling too much water out of the

45

river. We're a sensible people, we will cut back on that, and by the time we're back down on the farm, all will be well. Now, not only did we not cut back, but I think the record shows that allocations have increased by about a third since '81.

5 I just find that to be bewildering. At last Thursday's CAP meeting, Ken Sumner, the  
Ngarrindjeri representative presented his meeting report, and he used a – an image  
that I find useful in a slightly different context. He said that like it or not, his people  
are in a boat with the rest of us, a boat called Australia. He's angry that his people  
have been shunted down to the back seat. He said they are sitting down there, and  
10 they're yelling out, "This isn't going to work". And all I can say is, and perhaps I'm  
only a seat or two in front of Ken, but he's right. Can pick up the newspaper from  
the last few weeks or better still, friends of ours last week came back from Lightning  
Ridge to Milang. They described bare paddocks, no stock, stock are all in feed lots,  
just kangaroos in the paddock and on the roads, truck after truck after truck carrying  
15 hay.

MR O'FLAHERTY: Yes.

MR BAGLEY: Some of the hay has come from as far away as Western Australia,  
20 trying to keep the stock alive until we get can through to the next good season.  
We've got at least one federal member of Parliament petitioning that water can be  
borrowed from the Commonwealth Environmental Water Holder - - -

MR O'FLAHERTY: Yes.  
25

MR BAGLEY: - - - and allocated to hay growers so they can grow more hay to  
keep more stock alive. The Bureau of Meteorology advises that we're in for another  
three dry months and that the El Niño conditions are strengthening so we're still in  
the shadows of the Millennium Drought and a prudent farmer would be preparing for  
30 another dry period.

MR O'FLAHERTY: Yes.

MR BAGLEY: Now, surely that means we're pushing the system too hard, the  
35 country can't take it. But we seem to always be wanting to get through to the next  
balance sheet or the next election and it's not working.

MR O'FLAHERTY: Yes.

40 MR BAGLEY: If I could be made dictator of this Commission for a day, perhaps I  
will tell you what I would do, hoping that that might help. I would compel the  
Federal Minister for Agriculture to attend. We would assemble for the morning  
session on Sugars Beach opposite the Mouth where we could overlook Bird Island.  
See the dredges working. We could see how relatively feeble the outflow is, the  
45 fresh water. You could look at the rollers coming in, each one with its load of sand  
and I would ask – have an expert on hand to run us through what is expected under  
the – or the orthodox opinion of climate change, that is it's going to be wetter, it's

going to be dryer. I think that a 10 per cent drop in rainfall generates something like a 30 per cent drop of stream inflow.

5 Ocean levels are going to rise and then I would hope that you could step in and ask the Minister whether he or she has confidence that we have the necessary resilience to manage climate change. I would then put the party on to drive across the barrages which in itself would be useful to Raukkan where Ken Sumner and his people could be there to just sketch for the Minister what their traditions tell them about how the river has sustained their people for thousands of years and perhaps offer some  
10 opinions of how well Australia has gone in the last 200. And then I would invite – hopefully you would invite the Minister to reassure Ken and his people that all will be well.

15 We could drive down to Salt Creek Roadhouse for lunch. While everybody is eating their Coorong Mullet Gary Hera-Singh could detail his experiences of the South Lagoon that we could see out the window, some of the catches that he had, some of the bird life that he saw in the 1970s, before the Mouth closed. He could give some idea of why he has continually advised CAP that millions of fingerlings perish each year in the South Lagoon. They spawn in the North Lagoon. Their instinct is to go  
20 south to the Ruppia and scary as our average salinity readings for the South Lagoon remain, Gary believes that it carries very many deep pools where for nearly the last 40 years the salt has accumulated and that's what's killing the fish.

25 MR O'FLAHERTY: Yes.

MR BAGLEY: And then I would - - -

MR O'FLAHERTY: And it affects the growth of the Ruppia as well, doesn't it?

30 MR BAGLEY: That's right. It's the nursery – you could almost characterise that as the centre of our Ramsar agreements and our migratory bird agreements, the South Lagoon and it's virtually a saline desert. That's stretching a point. And then you could step in and invite the Minister to assure Australia that the Basin Plan will work. If a motorist tries to get onto a highway, we all know the sign that's facing the  
35 wrong way, go back. Now, I think the Basin Plan as released in the original Guide, gave us a highway, how to live in and manage this Basin. And we got onto the – since then, we got onto the wrong ramp. So I believe I'm speaking for many people around the Lower Lakes and all I can say is wrong way, go back.

40 THE COMMISSIONER: Thank you very much.

MR BAGLEY: Thank you.

45 THE COMMISSIONER: I haven't said this to anyone else. You will probably see some of your words in my report.

MR BAGLEY: Thank you. I hope that means that it has been useful.

THE COMMISSIONER: Thank you.

MR BAGLEY: I thank you for - - -

5 THE COMMISSIONER: Thank you very much for your help and for your patience today.

10 <THE WITNESS WITHDREW [4.25 pm]

THE COMMISSIONER: We adjourn until 10 o'clock here tomorrow. Thank you.

15 MR O'FLAHERTY: Thank you, Commissioner.

**MATTER ADJOURNED at 4.25 pm UNTIL FRIDAY, 24 AUGUST 2018**

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