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TRANSCRIPT OF PROCEEDINGS

O/N H-927213

MR B. WALKER SC, Royal Commissioner

IN THE MATTER OF THE MURRAY-DARLING BASIN ROYAL COMMISSION

ADELAIDE

9.58 AM, WEDNESDAY, 29 AUGUST 2018

Continued from 28.8.18

DAY 22

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

MR O'FLAHERTY: I know I've technically got two minutes, Commissioner, but I'm ready to commence if you are.

THE COMMISSIONER: Yes.

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MR O'FLAHERTY: Before I call the next witnesses I will tidy up a bit in terms of evidence and exhibits from yesterday. I tender tabs 1 through 6 of the folder relating to Ms Jan Beer, and I also tender the 'Goulburn Constraints Measure Business Case: Phase Two Investigations 2016'.

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THE COMMISSIONER: Thank you.

MR O'FLAHERTY: Our next witnesses are representatives from the Macquarie Marshes, and I call Mr Garry Hall and Mr Dugald Bucknell.

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<GARY ROBERT BEVAN HALL, SWORN

[9.59 am]

20 **DUGALD WILLIAM WENTWORTH BUCKNELL, SWORN** [9.59 am]

MR O'FLAHERTY: Thank you, gentlemen. Now, I will be – the Commissioner and I will be asking questions of both of you so the questions will be open for both of you to answer, but for the sake of the transcript, probably one at a time is probably best, and feel free to indicate if one of you is answering a question that the other wants to add to it; I would like to keep this fairly fluent and natural.

THE COMMISSIONER: You don't have to agree with each other.

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MR O'FLAHERTY: Indeed.

THE COMMISSIONER: You're bound to tell the truth.

35 MR BUCKNELL: Do you need us to identify?

THE COMMISSIONER: Yes. That would be good.

MR O'FLAHERTY: That might be useful, I think, just for the - - -

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THE COMMISSIONER: For the transcript.

MR O'FLAHERTY: For the sake of the transcriber, that would be very helpful. Having said that, I will ask questions of both of you. I will just ask specific questions first. Mr Hall, you're the President of the Macquarie Marshes Environmental Landholders Association?

MR HALL: That's correct.

MR O'FLAHERTY: And you, along with Mr Bucknell, are both cattle farmers on the Macquarie Marshes?

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MR BUCKNELL: Yes. That's correct.

MR HALL: Our country is within and adjacent to the Macquarie Marshes.

MR O'FLAHERTY: Yes, so it's – am I right in thinking – is it both your properties are partly on the Marshes and partly off; is that right?

MR HALL: The Marshes don't have a specific boundary. They're variable in area.

15 MR O'FLAHERTY: Yes.

MR HALL: So a fair summation would be areas of our holding receives beneficial flows from the Macquarie Marshes system.

20 MR O'FLAHERTY: And it's the same with you, Mr Bucknell.

MR BUCKNELL: The same with me, but I'm on the eastern side, so I'm on the eastern Marshes, which is probably – it's smaller and slightly less important. The major part of the Marshes are the western side, where Garry is.

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MR O'FLAHERTY: Okay. And there's a – the Macquarie Marshes Environmental Landholders Association, and I'm just going to call it the Association for the sake of convenience from now on, has provided a submission to the Commission. Gentlemen, you should have a folder in front of you. That submission should be

behind tab 1. Mr Hall, you're listed as the person to contact for any further queries. Do I take it that you're the primary author of this submission?

MR HALL: In conjunction with our membership, that's correct.

35 MR O'FLAHERTY: Yes, I was going to ask you if it was a collaborative exercise, I imagine.

MR HALL: Yes, it's sometimes difficult to get our community to engage as much as I had hoped but I've included them all in the draft stages of this document, that's correct.

MR O'FLAHERTY: They're probably busy with their day lives, I imagine.

MR HALL: It's all about priorities.

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MR O'FLAHERTY: Yes. And on that, in terms of your membership, you say that your members are local landholders, are they predominantly cattle farmers like yourselves?

- 5 MR HALL: Some being mixed, dry land wheat, dry land cereal cropping, sheep for meat and wool production, and beef cattle farming, but they don't all our membership don't reside within the local community. Some of them are absentee landholders.
- 10 MR O'FLAHERTY: I see.

MR HALL: That own country in the Marshes but live elsewhere.

MR O'FLAHERTY: Yes.

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THE COMMISSIONER: Is there anyone in the Association that would be fairly called an irrigator?

MR HALL: Sorry?

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THE COMMISSIONER: Is there any member of the Association that could fairly be called an irrigator?

MR HALL: Yes, that's right.

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THE COMMISSIONER: And what do they produce? Fodder or grain or

MR HALL: So, myself, I have an irrigation licence of which I grow cereal crops for beef production, but we do have other members that in lower sections between the Macquarie Marshes and the Barwon who are predominantly cotton farmers.

THE COMMISSIONER: And they are in your Association.

MR HALL: Paid members.

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- THE COMMISSIONER: Yes. And within the Association, are there tensions on account of some people being irrigator cotton farmers and others not, or is this all just seen as an example of the various use to which the water can be put?
- MR HALL: It's all about available time to invest in the Association, being a President of such a group at times does involve bringing different parties to the end goal, but we do have a commonality being that with the health –a wet, healthy marsh system provides flow-on benefits to the communities downstream of the Macquarie Marshes.

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THE COMMISSIONER: Literally and figuratively.

MR HALL: That's right.

THE COMMISSIONER: Now, in that context, I'm interested in one of the main points you put in your submission about the proposition that the Macquarie Marshes have been over-recovered. Could you explain to me what the Association understands that to mean, and how it came about, and what the Association's present position is about that idea?

MR HALL: The Macquarie Marshes in no way support the term of over-recovery.

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THE COMMISSIONER: I understand that. But it has been said and I understand it's something that the Association contests?

MR HALL: That's right. We do.

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- THE COMMISSIONER: What do you understand people to mean when they say they've been over-recovered and what is the Association's position in detail about that?
- MR HALL: Okay. So the term "over-recovery" is in reference to the Northern Basin Review. We hadn't heard that term in use to do with water policy or water debate in the Macquarie until the Northern Basin Review was during the process of the development of the Northern Basin Review.
- 25 THE COMMISSIONER: Yes.

MR HALL: Over-recovery to me, my interpretation of the term is that the Murray-Darling Basin Authority have decided that the environmental needs of the Macquarie system have – more water has been purchased than the environment has needed. We

THE COMMISSIONER: Does that translate to, and therefore more water could be given back to productive or consumptive use?

MR HALL: That's correct. So there was a volume of water specified that the Macquarie was over-recovered by that my assumption was to be sold back to extractive users.

THE COMMISSIONER: Sold by whom?

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- MR HALL: A good question. I've asked both the Commonwealth Environmental Water Holder and the New South Wales Government who have licence holdings in the Macquarie and - -
- 45 THE COMMISSIONER: What's the answer?

- MR HALL: Up until last Sunday, when Gabrielle Upton made an announcement, I was reasonably confident that neither of them intended to sell their water. But as of last Sunday we are waiting to find out.
- 5 THE COMMISSIONER: I think the State Minister's announcement amounts to a temporary sale, a sale of temporary water, isn't it, or is it permanent?
 - MR HALL: I'm not sure whether it's temporary trade or permanent.
- 10 THE COMMISSIONER: It was designed to meet the exigencies of the drought; is that right?
- MR HALL: That's correct, but for me and our Association who have membership on our local environmental Water Advisory Group who use all the latest science to underpin the decisions that are made by that group to advise the State Minister on the water needs of the Marshes, and the Macquarie River in-channel needs and connectivity to the Barwon-Darling, where there's not currently not enough water available to meet the needs today. So - -
- THE COMMISSIONER: Sorry. You may have misunderstood me. I do understand that's the Association's position, but the Minister's announcement, the State Minister's announcement as I understand it is framed in terms of the circumstances of the drought requiring a departure from what would otherwise be the case. Is that how you understood it?
 - MR HALL: Originally it was, but in the last two days I've heard that there's no restrictions on who and where that water's sold to.
- THE COMMISSIONER: Well, you've anticipated me. That is, if it was for the exigencies of a drought it certainly wouldn't be the selling of permanent water, would it? It would be temporary only?
 - MR HALL: I would hope not. That's correct.

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- 35 THE COMMISSIONER: I don't know that I understand the detail of the State Minister's proposal, is it permanent water being sold permanent rights, or just temporary?
 - MR HALL: I'm unable to give an answer, I'm unsure myself.
- THE COMMISSIONER: Well, one comment I think that is obvious to everyone now is that it's wholly inappropriate that such an important announcement be bereft of that kind of information. That's not mere detail. That's critical to understand, surely.
- MR BUCKNELL: Yes, absolutely. We have been searching to try and get that information.

THE COMMISSIONER: It's greatly to the Minister's discredit that she didn't ask her advisers to enable her to inform everybody, most importantly people like yourselves with personal, financial and social interests in the resource in question, whether we're talking about a permanent transfer or a temporary transfer.

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MR BUCKNELL: And also whether this is setting a precedent so that it can happen in every year for exceptional circumstances.

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THE COMMISSIONER: Exactly. In other words, the politics of water requires at least what I will call a courteous minimum of disclosure as to what is intended because as you see done once, it provides a reason, not always a good reason, but provides a reason for it to be done twice.

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MR BUCKNELL: Absolutely. But then that has a reflection on the management of the water when the planning is done for environmental water in years that there is a lot of water and there's a full entitlement, the planning – and Garry can explain more about the EFRG – but the planning is for years that aren't so wet. So 2016 was very wet and so the planning is then for how do we use the limited resources that – of water for the following years which more than likely if you've had a flood, are going to be drive.

20 to be drier.

THE COMMISSIONER: Yes.

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MR BUCKNELL: And so the EFRG had planned this water for three years. Now, if the Minister can turn around and take water from that, what is the purpose of planning for three years? Why not use it immediately so that it doesn't get taken in the second and third year for other uses?

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THE COMMISSIONER: That's a very important point you make. Well, now, the other thing that struck me, and I think it has been covered in one of your – that last part of your answer, that to take, remove water from environmental purposes and make it available to alleviate drought is, I would have thought, to do something which will unquestionably recur into the indefinite future. That is, we're never going to be without drought in terms of something that is around the corner. In other words, this is – this can't be seen as an emergency response. It appears to be a

words, this is – this can't be se change in a standard position.

MR BUCKNELL: I fully agree. And you're talking about the public perception of climate change.

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THE COMMISSIONER: No, I'm not talking about climate change, I'm just talking about the fact that we have droughts.

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MR BUCKNELL: Yes, but the climate, the publicly perceived idea of climate change is it will get drier. In the Marshes we have the situation that water is being removed upstream either for irrigation, towns or on-farm dams, so all up there has

been an enormous amount of water removed. So the Marshes and downstream of where those extractions happen are actually more inclined to be in drought.

THE COMMISSIONER: Yes. In other words, even without a drought there has been severe diminution of the flows so that to take environmental water away from the Marshes because of drought is as it were to magnify what's already a state of degradation.

MR BUCKNELL: Absolutely.

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- THE COMMISSIONER: Well, now, that is significant because, and I think you've referred to this in in your submission in general terms, the whole premise of the Water Act is that we, that is Australians, have been overusing the resource and we've damaged the biodiversity and we have to restore and recover and protect those
- values. That's why I was asking about tensions within the Association. I've been concerned from time to time with the idea that irrigators, as it were, are en bloc opposed to environmental watering and I've spoken to some irrigators and they don't seem to be opposed to environmental watering at all.
- It may be that some irrigation interests try to squeeze environmental watering to the bare minimum, but it doesn't seem to me to be something you can generalise about all irrigators at all. Do you have experience within the Association that can cast light on that for me?
- 25 MR HALL: Do you mind if I just go back?

THE COMMISSIONER: Take your time.

MR HALL: I've been busting just to make some comments re our previous discussion - - -

THE COMMISSIONER: Take your time.

- MR HALL: --- with this sale of environmental water by the New South Wales
 Government. In the Macquarie, the water portfolio is split into three different parcels. One being the water that's held within the Water Sharing Plan. There's 160,000 megalitres of which no water use licence fees are charged by the water managers. The second being the water that's held by the New South Wales Government as licensed water. That's the water that we're currently talking about
- 40 this morning that an announcement was - -
 - MR O'FLAHERTY: That's the water held by the Office of Environment and Heritage.
- 45 MR HALL: Correct. And the third being the Commonwealth Environmental Water Holder. Just to go back one step further, the Commonwealth Environmental Water Holder sell they fund the licence use charges from Treasury so they don't have any

ongoing water sales. Their volume of water at the start of the water year is what they've got available to use. The water that we're talking in question today managed by Office of Environment and Heritage, that's licensed water, they sell a small portion of that water to fund those water use charges annually.

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MR O'FLAHERTY: So as a standard practice, the Office of Environment and Heritage would sell a portion of their portfolio to irrigators?

MR HALL: Correct.

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MR O'FLAHERTY: In order to fund their own costs.

MR HALL: On a state-wide basis – and I have spoken to Justin Simpson who does the accounting on that and we don't always see a reduction out of the environmental water accounts in the Macquarie. It could be from a water sale in other areas, but

THE COMMISSIONER: What is the point of that system, by the way? I don't want to spend too much time on this. Why would you make water available for environmental purposes but insist some of it has to be not for environmental purposes in order to fund the environmental purposes?

MR HALL: So there's a couple of things there. This was very early days, 2008, 2009 of water recovery. Prior to the Basin Plan, prior to – it was done under the river bank fund that you may remember was a fund on garbage collection in Sydney and it was treading on quite virgin ground that people didn't understand how it was going to work. So we did support the process, our organisation, the Association supported the process of continuing to pay water use charges otherwise the remaining water - - -

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THE COMMISSIONER: When you say continued to pay, who continued to pay water use charges?

MR HALL: The licensed holders of that water. So as the licence was transferred from – from an irrigator who – whose water was sold - - -

THE COMMISSIONER: To OEH for environmental use.

MR HALL: Sold from a willing sale to the New South Wales Government, that those water use charges be paid. We didn't support that it - - -

THE COMMISSIONER: What's the point of that?

MR HALL: Sorry, sir. We supported the – the need for those licence fees to continue to being paid.

THE COMMISSIONER: Why?

MR HALL: Be being paid but we didn't need them – we didn't ever intend for them to become from water sales. We intended - - -

THE COMMISSIONER: Why did you support the notion that one arm of government would pay another arm of government for access to water for environmental purposes?

MR HALL: We thought it would be a good look for - - -

10 THE COMMISSIONER: Why?

MR HALL: For the community. Because it costs money to maintain the infrastructure.

15 THE COMMISSIONER: Yes.

MR HALL: To - - -

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THE COMMISSIONER: That's why I pay tax.

MR HALL: Exactly. But - - -

THE COMMISSIONER: That's why I pay tax. Why would it be funded by artificial trade between the government and irrigators?

MR HALL: To me, it made sense at the time. It does get very complex. It is – there is some – it's not just the – the licensed water that the New South Wales Government own, the general security water. There is also some unregulated licences that came with the land purchase in the Macquarie. And - - -

THE COMMISSIONER: These rights have been bought with public money.

MR HALL: That's correct, and that – and those licence use charges – currently, water is sold to pay for those charges.

MR O'FLAHERTY: Is it possible the reasoning behind that is to put a government licence holder, in this case the Office of Environment and Heritage, on the same commercial footing as a – a non-government licence holder, an irrigator, and such that when they do enter the market they're on the same, perceivably, never on the same footing but it's an attempt to create a more equal market. Is that a possible explanation?

MR HALL: Yes.

45 MR O'FLAHERTY: I don't say it's a full explanation.

MR HALL: That's what I was looking for, but Dugald's got a comment.

MR O'FLAHERTY: Yes. Sure.

MR BUCKNELL: That was the feeling at the time. We didn't know the full cost structures of the irrigation industry.

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MR O'FLAHERTY: No.

MR BUCKNELL: But we had been told that the irrigation industry was a full cost recovery industry. It wasn't being subsidised.

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THE COMMISSIONER: It just isn't. Taxpayers have provided the infrastructure. This is nonsense.

- MR BUCKNELL: I fully agree. But back then I didn't have the understanding of that because we've been told the irrigation industry is so productive, it pays its way, it pays all its bills, it's all those things ,when in actual fact I now know that's not the case. But back then - -
- THE COMMISSIONER: I'm not suggesting it should be the case. I'm happy to provide infrastructure as a taxpayer, but I would like people not to boast of being independent if they're not.
 - MR BUCKNELL: Yes. Honesty is what everyone needs, and then the public and the powers that be can justify however they want to justify it.

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THE COMMISSIONER: One of the problems, as Mr O'Flaherty has put it, justifying this on the basis that they should be on the same footing is that to be on the same footing in a market you have to be an autonomous decision-maker: will I buy or sell and at what price? That's the essence of a market. And yet what happened on the last weekend with the State Minister: that's not market behaviour. That's a directed economy.

MR BUCKNELL: Yes.

35 THE COMMISSIONER: Of the kind that Stalin used to run.

MR BUCKNELL: And what's actually interesting is some of our members have been in drought essentially since the end of 2012 except for the period of 2016 when we had a very big flood of four or five months and then we went back into drought again. So the people that you're taking the water from are the ones that have been in drought the longest to supposedly go into a fund that is – is going to help towards drought requirements.

THE COMMISSIONER: Yes. I must say it's as clear as mud to me as to how one really justifies in terms of the overall Basin Plan or Water Act principles this appearance of a market where the reality is quite different. Where, at the Commonwealth level it's a bit different. The Commonwealth holder really does

have the legal position to make the autonomous decisions which is the hallmark of a person participating in the market, but at the State level it seems to be completely different.

5 MR HALL: This is a first intervention. On Sunday's announcement, it was the first time that there – the principles have been challenged and it is – it is unchartered territory where we sit right now. In Macquarie I feel reasonably comfortable that it's not going to come at a huge cost but we will always be able to say that any damage that's likely to be caused during the recovery period within the Macquarie Marshes post the 2018 drought could possibly be as a result of Sunday's announcement by the Minister.

THE COMMISSIONER: And as I think you pointed out, this is not making water available to people who could use the water but don't have it. This is making it available to a market where its destination will be determined by the highest price.

MR BUCKNELL: Yes.

THE COMMISSIONER: Isn't that right?

MR BUCKNELL: Yes. Yes.

THE COMMISSIONER: Well, now, that means that it's really not much more than the increase of supply; that is, the market is told there is going to be a certain volume made available from environmental holdings, increased supply, if you like, which seems odd bearing in mind that as I understand it there's no shortage of supply. That is, if you want to buy the water, you can buy the water.

MR HALL: That's correct, the - - -

THE COMMISSIONER: If I want to grow a fodder crop, Barnaby Joyce's suggestion, if I want to grow some fodder and it were the right time of the year, at the moment it's only a matter of how much I need to pay in order to obtain the water.

35 MR HALL: Yes, correct.

MR BUCKNELL: There is a slight, and Garry will be able to explain it, there has been allocation in the Macquarie but the water isn't actually in the dam and available at the moment because they allocated the clouds and the clouds didn't arrive. So there has been complications there that Garry would be able to better explain than myself. So when you say - - -

THE COMMISSIONER: Could you explain why that's a complication, because that just seems to me it's in the nature of things. That's the way the system works.

MR HALL: We are in unchartered territories with the current inflows into the Burrendong and Windamere dams. We have - - -

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THE COMMISSIONER: That's in the nature of things, isn't it? You always look ahead and make certain assumptions knowing that they might be disappointed?

MR HALL: Hope for the best and plan for the worst is what we do.

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THE COMMISSIONER: That's precisely what I mean.

MR HALL: With our agriculture and enterprises. But with the over-allocation of the water resource, and I can only speak for the Macquarie Valley which I'm somewhat familiar on, there's assumptions made on projected inflows. So we are at 10 a stage now – we're in our second year of carrying over the allocation, and could step back to one of the reasons that we supported the general security environmental holdings to be treated equally to the others so as that carryover facility could be used and it has been – historically it's been a great benefit to the Marshes and to the river system up and down. So when the decision was made by the local environmental 15 water advisory group to carry over reasonably large volumes of water, it was an assumption of mine that when that water would be called upon it would be available. But as water managers have allocated water that Dugald correctly said hasn't fallen from the sky yet, the water as of Friday two weeks ago were only available to use 70 20 per cent of the water that was carried over.

THE COMMISSIONER: Now, when I say that's in the nature of things, that is in the nature of any system that quite sensibly allocates by looking forward, hopes for the best, and there's always the case, isn't it, that it's subject to adjustment in light of experience? That's a given in relation to water entitlements, isn't it? That 100 per cent enjoyment all the time is not common?

MR HALL: It's becoming less common.

THE COMMISSIONER: And as I say, it's in the nature of things because the allocation is done by projection.

MR BUCKNELL: Yes.

35 THE COMMISSIONER: And projections are rarely 100 per cent accurate.

MR BUCKNELL: But they do update the allocations on a very regular basis. So is there a need to actually announce something that they're thinking is going to happen. Why not be more conservative in that area and regularly update it as reality becomes the case?

40 the case?

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THE COMMISSIONER: That is, in the ordinary way, whether you were trading stocks and shares or whether you were speculating in land or designing and commercialising a product, hoping that people will want to buy it, that you're constantly adjusting your views of the relevant future with experience and just with rethinking.

MR HALL: Yes. Yes.

THE COMMISSIONER: So constantly making sure you collect the right data and exposing it to critical thinking, not only your own.

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MR BUCKNELL: Yes, one of the - - -

THE COMMISSIONER: But as I understood it, you do get information about what allocations are looking like more or less continuously, do you not?

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MR HALL: Water availability is on a weekly basis.

THE COMMISSIONER: Yes.

MR HALL: So – but this process now is we've entered this new drought record; there's been quite harsh water savings to – by New South Wales, Water New South Wales to attempt to be able to deliver as high a percentage as possible of the carried over water that has included block releases in the regulated reach of the Macquarie system. But it's caused considerable hardship to - - -

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- THE COMMISSIONER: But do you understand that the weekend announcement to relate in any way particularly to water for the Marshes? Does it it doesn't relate only to that, but does it have any effect on that? What the State Minister announced?
- MR HALL: My understanding is that any reduction in the available water that's held in the account by the Office of Environment and Heritage will see less flows in the Macquarie entering the Marshes and less water connecting to the Barwon-Darling.
- 30 THE COMMISSIONER: Now, flow from where?

MR HALL: From Burrendong and Windamere Dam.

THE COMMISSIONER: Right. And at the moment those dams, as I understand it, don't have enough to constitute 100 per cent available for the amount in the environmental account.

MR HALL: Correct.

THE COMMISSIONER: Just as they don't have 100 per cent available for general security or other entitlements, isn't that correct?

MR HALL: That's correct.

45 THE COMMISSIONER: So does the effect of the announcement mean that there has been a reallocation of priority so that environmental water is put at the bottom of the priority?

MR HALL: No. My interpretation of the announcement that a likely water sale – and I'm hoping that we're not talking large volumes of water because the announcement was over five or six valleys and it was 15,000 megalitres in total but the precedent has been set that it's a volume of water that's to be sold out of the environment's account, that's not likely to have any impact on other water users' entitlement

THE COMMISSIONER: So their entitlements stay the same. In effect, there has been a forced decision, a dictated decision to sell environmental water to – for consumptive use; correct?

MR HALL: Yes, correct. Yes.

THE COMMISSIONER: At a price which is going to be just produced by the market.

MR HALL: That's right.

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THE COMMISSIONER: So that the ultimate user of that water may well be somebody who is very well set up to deal with the drought?

MR BUCKNELL: Most likely.

THE COMMISSIONER: That's presumably why they have the capacity to pay.

MR BUCKNELL: Yes. Yes.

THE COMMISSIONER: Right. So it's a drought alleviation measure for those least in need of a drought alleviation measure then. Isn't that what it amounts to?

MR BUCKNELL: That's our common – what people in our membership that I've spoken to are saying. It's amazing the irrigation industry in the Narromine area have just had one of their best years on record and here they're being able to gain more water when everybody else in agriculture is suffering this drought.

THE COMMISSIONER: I'm correct, aren't I, that in physical terms, none of this water that the Minister said she was making available in this fashion goes anywhere near troughs in desiccated cattle paddocks of the kind the television likes to show?

40 MR HALL: No, that's correct. You are correct in assuming that.

THE COMMISSIONER: If you were – if you had a sentimental propagandist approach to justifying this, one thing is for sure none of that has anything to do with the thirsty cattle following the water trucks.

MR BUCKNELL: No.

THE COMMISSIONER: Well, it has to do with pivot irrigation, doesn't it?

MR HALL: It could possibly be pivot, more likely flood irrigation.

5 THE COMMISSIONER: In other words, industrialised cropping.

MR HALL: That's correct. The main water use period in the Macquarie is from October to March. Summer crop dominant, growing cotton. Any volume of water that would be sold by the New South Wales Government now would most likely go to that use.

MR O'FLAHERTY: So those – that cropping, enterprises could finish off a crop if they didn't have enough water to do so. Is that - - -

MR HALL: Well, the term "finish off a crop" is being used in interesting ways during this current debate. So irrigators often plant an area that they have a volume of water for.

MR O'FLAHERTY: Yes.

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MR HALL: That land isn't restricted from receiving beneficial rainfall. So at times they are likely to plant extra crop that's not in the irrigation system - - -

MR O'FLAHERTY: In the hope that they will get more - - -

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MR HALL: --- that has the ability to be irrigated. When claims are being made that that water – and this is talking right across New South Wales, not just in the Macquarie Valley. When claims are being made that that water could possibly go to complete crops that have dried out and suffered from the extreme drought conditions that a lot of New South Wales is experiencing at the moment, it may not necessarily be crops that have been irrigated and they've used all their entitlement - - -

MR O'FLAHERTY: Planted in anticipation of an irrigation but planted in anticipation of rainfall.

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MR HALL: That's correct.

MR BUCKNELL: Yes. Could I go - - -

40 THE COMMISSIONER: I know this sounds awfully harsh but it's what I feel at the moment from what the evidence is, so that would be water being made available for people who have miscalculated.

MR HALL: It could be termed miscalculation. It could be – use another term.

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THE COMMISSIONER: It's not a criticism.

MR HALL: That's correct.

THE COMMISSIONER: It's the risk taking that all of us in some way or another undertake.

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MR HALL: That's society. Yes.

THE COMMISSIONER: People for whom the risks they knowingly took have materialised.

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MR HALL: That's correct.

MR BUCKNELL: Could I - - -

15 THE COMMISSIONER: So the government is alleviating the effect of taking a risk.

MR HALL: Yes.

THE COMMISSIONER: Which doesn't sound like a market-oriented government to me.

MR HALL: No doubt there has been substantial pressure placed on the government to come to that conclusion.

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THE COMMISSIONER: It's retrospective cushioning by government at taxpayers' expense of an entrepreneur's risk.

MR HALL: That's right.

- MR BUCKNELL: Can I go back to your, talking about cattle getting a drink out of a trough, on the eastern Marsh, and all through the Marsh, landholders and I'm one of them will actually put water from this environmental flow into dams and we will water stock with them. And so it is actually the opposite to what you're saying,
- they're taking water away from that situation. And so it does sound people bring it up, say why can you take water, environmental water and put it into stock dams? That's not a correct use. In the eastern Marsh, we're only allowed 10,000 megalitres a year and so if we haven't had an environmental flow we can call for a replenishment flow, but that replenishment flow has never been allowed to come out of Burrendong Dam. It has to come out of the tributaries, so quite often it doesn't
 - happen before the environment wants to the powers that be want to release the environmental water.
- So then it has been agreed that we can get water from the environment flow and likewise, if we have our replenishment flow beforehand the environment gets use of our replenishment flow so we're working together. So when you say, talk about

stock water, this water being used to water some stock when you take it away, it's actually taking water away from an even more drought affected area.

THE COMMISSIONER: Yes. So going back to over-recovery that I was asking you about, that relates ultimately to the controversy concerning cap factors, doesn't it?

MR HALL: Well, at no stage was over-recovery used in reference to too much water entering the Macquarie system, the Macquarie Marshes and tree deaths from drowning or like. The connotation of over-recovery for water for environmental purposes when there's a – a large – two large dams and a very active extraction industry upstream, we're never going to achieve the environmental outcomes pre development while that demand is on the system. So over-recovery was a – was a number that was firstly - - -

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THE COMMISSIONER: It conveys two ideas, doesn't it, related? The first is you can get the necessary, desirable if you like, environmental outcomes with less water than had been thought, so that's over-recovery in a sense that the recovery amount is getting back water for the environment. How do you define that, look at what outcomes you want, how much water you need for that outcome, lo and behold, we've recovered back more than we need therefore it's over-recovery. That's one idea. And the other idea is that you can therefore make more available – more water available for consumptive use, most irrigation.

- MR HALL: My interpretation of the document, Northern Basin Review, the document as a result of the Northern Basin Review was that more more water was to be available for consumptive use.
- THE COMMISSIONER: Because not as much water as had been thought is necessary to achieve the environmental outcomes.

MR HALL: No.

THE COMMISSIONER: Sorry, that's the theory of how one would do an SDL adjustment, yes.

MR HALL: That - - -

THE COMMISSIONER: It comes back to cap factors, doesn't it?

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MR HALL: That's right, yes, but at no stage was environmental water demands investigated.

THE COMMISSIONER: No, and I understand from your submission that you take the position that you can't talk in terms of over-recovery. You can't allocate more for consumptive use until you first establish what it is the environment needs.

MR HALL: That's correct.

MR BUCKNELL: And keeping in mind before extractive uses, for thousands of years Mother Nature rained and supplied water down the system and we're not actually raining more water or anything, so that would be over-recovery if we invented a way of raining more water.

THE COMMISSIONER: I think both of you have been making it clear this morning on any view it won't be over-recovery compared to a pristine state of affairs because on any view the water plan, the Basin Plan requires that the environment gets less than it would have without development.

MR BUCKNELL: Yes.

THE COMMISSIONER: And I think everyone accepts that, I certainly accept that the Basin Plan is not there to recover the environment to what it was before European settlement and development, but rather to a point beyond which there will be compromise of the environmental values. Otherwise it's to be available for economic use.

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MR BUCKNELL: Yes.

MR HALL: Tangled up with the over-recovery is the so-called toolkit measures and we have touched on these in our submission.

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THE COMMISSIONER: Do you know why they're called toolkit measures? I've asked many people. Do you know why?

- MR HALL: No, I don't. But we support and have always supported toolkit
 measures over and above the existing environmental water recovery target, rather
 than instead of. Environmental restoration works and programs have been a feature
 of water management in the Macquarie for many years. It's not a new thing. The
 term sometimes changes, depends on who's doing the planning, but our view as an
 Association has always been that we we look forward to improved environmental
 outcomes as a result of works such as toolkit measures, but over and above the
 existing water holdings rather than a reduction in.
- THE COMMISSIONER: I find it quite difficult when looking at them to see a common element by which they are activities or instructions or approaches which reduce the amount of water the environment needs. I can't I read they're a very disparate bunch, this toolkit measure, and I find it very hard to see the common element that says all of them have this element that if this succeeds you will need less water for the environment.
- 45 MR O'FLAHERTY: Like, for example, how a fish trap can equate to a or a fishway can equate to a reduced recovery of volume of water.

THE COMMISSIONER: I gather you say well, fishways are a great idea and they should be happening regardless of what you do concerning allocation between consumptive and environmental use. Is that right?

5 MR BUCKNELL: That's correct.

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MR HALL: Fish ladders, fish screens on pumps, ability for fish to move up and down weirs, they're all great toolkits but - - -

10 THE COMMISSIONER: It's hard to see why that reduces any amount at all of the water the environment had.

MR BUCKNELL: Yes. It's quite easy. If you have a fishway how does that help a frog out in the floodplain? It doesn't, or how does it help the couch or how does it help ---

THE COMMISSIONER: The couch still needs a seasonably appropriate amount of water, doesn't it?

- MR BUCKNELL: Yes, and these toolkit measures in the Macquarie it has been managed for 50 years. If these toolkit measures are so important doesn't that by itself say that the management for the last 50 years has been so inadequate it hasn't been already done? It seems - -
- THE COMMISSIONER: It's good to learn eventually rather than never, so in a sense we are still left with a question how does fish ladder affect the amount of water necessary to produce the legislated environmental outcome, which I stress is an amount of water beyond which consumptive take compromised the environmental values. That's my paraphrase of what the statute calls for. Now, that's no doubt full of judgment and evaluation, but more to the point, full of scientific observation and reasoning. But for the life of me, and I'm neither an ecologist nor a hydrologist but for the life of me, I don't understand what you say how what the needs in terms of flow, seasonally appropriate, volumetrically appropriate flow, how that is in any way reduced by the fish benefitting from a ladder.

MR BUCKNELL: We agree completely. That is why we say it should be over and above the - - -

THE COMMISSIONER: Which is why I never understood this figure of speech "toolkit". I think of a toolkit as an assembly of more or less specialised or specifically designed instruments to achieve an outcome: my hammer, my screwdriver, my protractor, whatever. Because you can define your outcome, but the outcome of enabling fish to travel, as they need to for their life cycles in the face of artificial impediments, doesn't seem to me to have as its outcome anything that is reflected by a diminution in the amount of water you would otherwise need for the environment.

MR BUCKNELL: Yes.

THE COMMISSIONER: It's a tool, an excellent tool, but to produce reduction in impediments to fish life cycles, it doesn't seem to me you can say well, therefore that 10 megalitres we can deduct from what the environment needs.

MR BUCKNELL: Yes.

MR HALL: It needs - - -

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THE COMMISSIONER: That's why I don't like the word. I think toolkit is a very unfortunate expression. It's as if all these instruments are here available, and they all have one thing in common: they can reduce the amount of water necessary to the environment. But I look at the list of them and I just can't see that's true of them. It might be true of some of them, but not true of all of them.

MR HALL: It needs to be included in the context of the current health of the environment. We're focussed on fish, but there's other elements with – within the environment that are suffering and the Ramsar ecological character and description of the Ramsar sites in the Macquarie Marshes, the Water Act are all processes to try and recover more water for the environment. During the submission stage of the Northern Basin Review there was a pressure on from industry to claim that the environment would – it's not all about water. Their catch phrase was more than flows.

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THE COMMISSIONER: Or another catch phrase which I've increasingly found offensive because it doesn't seem to have any basis in the facts, is that so-called environmentalists were taking a "just add water approach", which I presume is some clever mocking of it as if it were some sort of simple cookery or something. I've not seen any environmentalist, either printed or giving evidence in this Commission, who has had a "just add water approach". Indeed, they are mostly themselves very critical of the idea that just adding water is good enough. Environmental watering seems to be so much more than that: seasonality, duration, location, etcetera, etcetera.

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MR BUCKNELL: Yes.

THE COMMISSIONER: So you can take it that it's passed beyond a mere provisional view that that's wrong and offensive and destructive of the necessary community trust and I'm almost certain to report that it's high time that kind of rhetoric stopped and people started talking about this more seriously. Did the Association take any role in – during the Northern Basin Review in relation to toolkit measures that affected the Macquarie Marshes?

45 MR HALL: We made it quite clear in our submission that, we forwarded a copy to you, to the Northern Basin Review that we supported – we only supported toolkit measures over – on top of - - -

THE COMMISSIONER: Yes.

MR HALL: --- current environmental water holdings, rather than instead of.

5 THE COMMISSIONER: Yes.

MR HALL: Some projects have been in progress for the duration of time that environmental water has been managed in the Macquarie. It has been seen as a need to be able to get bigger results from a diminishing resource, and rather than instead of, we've always focussed and our relationship with the Northern Basin Advisory Committee had been reasonably close. They had visited the Marshes and we had flown over the Marshes with them, and we made it quite clear, and I was led to believe that they understood that the only toolkit measures we supported were on top of the current environmental water holdings. We can do it better. There's absolutely no doubt. We can improve the rules of environmental water management. We can improve the infrastructure but we – it's a downhill spiral if we are expected to do it with less water.

THE COMMISSIONER: We start with a proposition that we have now had for probably a couple of generations, much less water than would have been the case without development. We accept that that's going to be the case under the Water Act, but there's a limit which the Water Act says is the point at which you compromise the environmental values. The only question is whether or not we've hit that sweet spot – in terms of volume, that is.

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MR BUCKNELL: To give you an idea, there are things in the Marshes and the floodplain that our group knows that we can fix which would improve things. One such thing is channelisation in the eastern Marsh and all over the place. Channels are being cut out and deepened and that sort of thing. And to get permission to do that is a very difficult, and by the time you've – you've got a small channel developing, by the time you get permission it has become a monstrous work. And so that is something that we would call a localised toolkit measure.

THE COMMISSIONER: Can you explain that one to me more, please?

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MR BUCKNELL: Well, because the - - -

THE COMMISSIONER: This is natural channelising or artificial channelizing?

MR BUCKNELL: It's naturally artificial. Because the amount of water has changed and areas aren't being as they were originally – so you would have big lagoons and floodways that were very flat, maybe 100 metres across and the middle being a foot deeper than the outside, and the water going very, very slowly across it. It's now totally dried out for nine months of the year or longer on the eastern Marsh, on my side, and so then that totally dries out, the ground cracks, and then when there's a release of water, the water comes down in a narrow band, when it first gets there, it erodes the dirt, where the water meets the dirt erodes that leading edge, and

it flows down the cracks. And so over time that erosion deepens and deepens that spot and then eventually that becomes, instead of being two foot wide and six inches deep, over the period of the last 30 years there are places there that are as wide and as deep as this room.

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THE COMMISSIONER: Yes.

MR BUCKNELL: And so - - -

10 THE COMMISSIONER: It's artificial in the sense that it has been produced by the reduction inflows on account of regulation and consumptive use.

MR BUCKNELL: Yes.

15 THE COMMISSIONER: But it's natural in the sense that what happens when water hits the earth in that condition.

MR BUCKNELL: Yes. Yes. And then the result of that is the water flows much quicker.

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THE COMMISSIONER: Right. Yes.

MR BUCKNELL: And the amount of water required to get out to the floodplain is much greater.

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THE COMMISSIONER: Yes. Now, how do you fix that in the toolkit measure how do you fix that?

MR BUCKNELL: It has now got to the point where it would require a huge amount of money but it is still getting worse and worse. So - - -

THE COMMISSIONER: What do you do? Slow the water down?

MR BUCKNELL: Yes. Slowing the water down is the way.

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THE COMMISSIONER: Snags, in effect.

MR BUCKNELL: Snags, a rock, but you don't want to have a permanent solid structure.

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THE COMMISSIONER: No.

MR BUCKNELL: Because all that does is divert the water away.

45 THE COMMISSIONER: That's why I'm saying snags.

MR BUCKNELL: Snags or a rock structure. We have rock structures that – on my place I don't actually have one, but there is ones with licences that have worked over time. Our latest feeling probably better would be something along the lines of timber, logs or trees like snags to slow it down. Whether that fixes it over time, we don't have the experience.

THE COMMISSIONER: How would that – how – that could be done either at the expense of the individual landowner who sees productive side benefit, on the private land, or it has to be done somehow at public expense?

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MR BUCKNELL: Yes. One of the things – we're all very aware of the people downstream, the people upstream in our group. And so one of the problems is perceived, if I'm upstream and do it and all of a sudden someone downstream sees that I'm actually getting more flooding this time, because I've repaired it, than last time, because there's a limited amount of water they perceive and they're probably correct that they're going to get less water or get it at a slower time, it's going to take longer to get there.

THE COMMISSIONER: Yes.

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MR BUCKNELL: So it's something that we need to do as a community group. It's not something that you can go out individually and go over the top. Especially with the as big as this room type situations. That's a lot of water. If people were allowed to do it when it was very small, the change would be very little. A stitch in time saves nine.

THE COMMISSIONER: Yes. Thanks.

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MR HALL: We are trying currently – the New South Wales Government is 30 implementing a Macquarie Floodplain Management Plan and our Association is trying to include in that management plan space for siltation, erosion control, ongoing works, and I am a little encouraged by progress made thus far. Because what has been happening is those land-holders that have been taken on themselves and doing work to prevent - - -

THE COMMISSIONER: Channel scouring, yes.

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MR HALL: --- eroded gully going through the middle of their paddock, they have become familiar with aircraft flying over taking photos and used as propaganda against reasons – against water – environmental water being delivered to the Marshes. This all started - - -

THE COMMISSIONER: How would that be propaganda against environmental water for the Marshes?

MR HALL: The assumption is that the nature reserve that's Crown land unmanaged by New South Wales Government within the Marsh area is the only beneficiary of overbank flows within the landscape.

5 THE COMMISSIONER: Your explanation of the stark contrast photos I think goes to this, which I've read. Thank you.

MR HALL: Thank you.

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THE COMMISSIONER: Yes. Well now, sorry, how does that constitute propaganda against environmental flows? Only the national park benefits therefore

MR HALL: Claims it's not reaching the target area. In the – target area is a loose term in the Macquarie because there's very often multiple benefits both instream - - -

THE COMMISSIONER: I suppose I'm struggling with the idea as to why, if it were true which it's not, if it were true that only the national park benefitted, why would that be a reason not to do something? I take it people don't have some sort of standing opposition to national parks, do they?

MR HALL: No. No. You may have – I may have explained it the wrong way. So the assumption being that the water that's managed for the environment, the only target is the national park.

THE COMMISSIONER: Why would that be - if that were true, and it's not, why would that be a bad thing, by the way?

MR BUCKNELL: It's not. It's – the water for the environment, the national park and the environment, because at Warren there are more bird-breeding areas outside the national park of the nature reserve.

THE COMMISSIONER: That's one of the reasons why it's significant to say it's not true that only the national park benefits.

MR BUCKNELL: Yes.

THE COMMISSIONER: But I'm just testing this reasoning in terms of propaganda. Even if it were true, I would have thought that would tell you two things: good, and thank goodness for national parks.

MR HALL: Correct.

THE COMMISSIONER: And the birds would think the same thing.

MR BUCKNELL: Yes.

MR HALL: That's right, the birds don't have boundaries, and we have found, like many national parks, the investment in day-to-day management is somewhat lacking and that the areas adjacent to the nature reserve have become the habitat feeding areas for the colonial nesting birds that historically the marshes are renowned for.

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THE COMMISSIONER: Well, mercifully, my Commission doesn't extend to checking on national compliance with Ramsar, but obviously to fulfil our national obligations we do have to spend money on preserving the character.

10 MR BUCKNELL: Yes.

THE COMMISSIONER: Of the wetland.

MR BUCKNELL: Yes. Yes. But the main objective of the people that are presenting photos is to give a bad light to the water going to the environment. The result of which - - -

THE COMMISSIONER: Can you just explain what bad light it is giving?

20 MR BUCKNELL: Say the photos of a fence line with management - - -

MR O'FLAHERTY: It might assist. We do have a copy of the photo that was referred to by Mr Kay that we can use as a bit of visual aid so to speak. So the witnesses be – this was handed in by Mr Kay during evidence so that we can talk by reference to that photo and your response to it, essentially.

THE COMMISSIONER: So where is that again?

MR O'FLAHERTY: It should be attached to an email correspondence between Mr 30 Hall and - - -

THE COMMISSIONER: It's this one.

MR O'FLAHERTY: it's that one. That's correct, yes.

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THE COMMISSIONER: Have you got that, gentlemen?

MR HALL: All I've got is my response to you.

40 THE COMMISSIONER: So there's a copy of the photo in question.

MR HALL: Yes.

THE COMMISSIONER: The nature reserve on the right from which grazing is excluded by implication on the left where there is grazing. By the way the picture depicts, I suppose, some channelising; is that right?

- MR HALL: That area in question is, it's pretty stable at the moment but we're monitoring it and the Office of Environment and Heritage have got got some vegetation transects through that area.
- 5 THE COMMISSIONER: About how deep should I understand those channels there to be?

MR HALL: Yes, not quite waist deep, the channel, the junction there is the first V on the fence line.

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- THE COMMISSIONER: Thanks. Good. Now, can you explain to me how this might be understood to be an argument against environmental watering?
- MR BUCKNELL: In the public perception, the people that aren't involved, if they see something like this they go, that looks terrible.

THE COMMISSIONER: What looks terrible?

- MR BUCKNELL: It looks terrible that on the left looks to be bare country and it has obviously been stocked and eaten, and on the right is flood country, is Marsh country, nature reserve.
 - THE COMMISSIONER: I'm not sure I I'm entirely sympathetic with that, I mean, a grazed paddock always look different from bush, but anyhow.

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- MR BUCKNELL: That's right.
- THE COMMISSIONER: Leave that aside. How does that cast any adverse light on environmental watering?

- MR BUCKNELL: It's just the public perception that that those people don't there don't know what they're doing, which is not the case because management in a variable climate ends up, you don't know at the beginning of the year how much rain you're going to get for the following year. It's only at the end of the year that you
- can look back at management. So having a mosaic of managers we will have some that are correct some years and some that are correct other years. And no one last Christmas knew we were going to be in a drought this Christmas, anywhere in eastern Australia.
- 40 THE COMMISSIONER: Continue the thought for me. So we looked at this picture and says the people in charge of the left-hand side don't know what they're doing, right, and so what in relation to environmental watering?
- MR BUCKNELL: So then the public perception can be garnered to then put political pressure on to say that water isn't achieving what it's meant to do.

THE COMMISSIONER: So let's not do environmental watering because some people aren't using it well.

MR BUCKNELL: Yes.

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MR O'FLAHERTY: It's being wasted on the left-hand side.

THE COMMISSIONER: Well, that's just childish, isn't it?

MR BUCKNELL: It is childish but that is the argument and then it can be said we can be more productive with that water if you give us more of it for the irrigation industry.

THE COMMISSIONER: So instead of this picture, a flourishing cotton field.

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MR BUCKNELL: Exactly.

THE COMMISSIONER: This is childish. Thanks. I think I understand now but I won't be spending much time on it. Thanks.

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MR HALL: Can I – just a dot point there, and I have to agree, childish, this photo was taken in 2002.

THE COMMISSIONER: I've read your

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- MR HALL: So no further photos were backed up. Office of Environment and Heritage have vegetation transects in that paddock and as a local community we're very proud of the results we're getting in that landscape.
- THE COMMISSIONER: There can't be an Australian who doesn't understand that if you put a fence line in and there are beasts grazing on one side and not on the other side, you will be able to tell the difference, not only on the ground, but from above, in the air. The short answer is so what, the water Basin Plan is not here to stop grazing. To the contrary.

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MR BUCKNELL: Yes.

THE COMMISSIONER: Thanks.

- 40 MR O'FLAHERTY: I wanted just to cover off on one of the many questions that the Commissioner asked you in that last discussion in relation to the over-recovery, and the Commissioner referred to the dark art of cap factors. I don't want to spend too much time on this, mainly because I don't understand too much on it.
- 45 THE COMMISSIONER: It might be a reason to ask it, I would have thought.

MR O'FLAHERTY: But broadly speaking, I'm going to dive in regardless, Commissioner. Behind tab 4 of the folder in front of you is a submission. Do I take it, is that a submission that was made in relation to the latest review of cap factors in the New South Wales Government?

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MR HALL: That's correct.

MR O'FLAHERTY: Yes. And broadly speaking, do I understand the – the Association's opposition to what is proposed in that reform, namely increasing the cap factor. I think it's an increase from .42 to .56 per cent. Your opposition is, well, actually on the ground reliability has decreased, in a nutshell, is that the point you're making?

MR HALL: Well, there's a few points in there.

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MR O'FLAHERTY: Yes.

MR HALL: And it's – this document is in my interpretation of how it's likely to have the best – biggest impact is that the – we call it reliability on the ground.

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MR O'FLAHERTY: Yes.

MR HALL: It's the time that's available for you to access 100 per cent of your allocation.

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MR O'FLAHERTY: Yes.

MR HALL: Variations in the percentages of that reliability gives the New South Wales Government an opportunity to allocate floodplain harvesting entitlements. The – this document and the floodplain harvesting policy are being run at the same time.

MR O'FLAHERTY: Yes.

- MR HALL: So our the Association wanted to bring to the New South Wales Government our concerns that the reliability has continued to decline and they're saying that there's more water available than there was when they did the last the Murray-Darling Basin Plan and the 2004 Water Sharing Plan that we operate under.
- 40 MR O'FLAHERTY: Yes. All right. And I also just wanted I think that's as much as I wanted to ask you about cap factors, unless you had anything else. I'm very grateful. The - -

MR BUCKNELL: Could I - - -

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MR O'FLAHERTY: Certainly.

MR BUCKNELL: In the original Basin Plan, in the Macquarie they had without development inflows of 3,200 gigalitres.

MR O'FLAHERTY: Yes.

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MR BUCKNELL: In the Northern Basin Review they've brought that back to 2,800 gigalitres.

MR O'FLAHERTY: So this is a change in the Baseline Diversion Limit, I think.

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MR BUCKNELL: No. No.

MR O'FLAHERTY: Or is it changes without development scenario?

15 MR BUCKNELL: Without development.

MR O'FLAHERTY: Right.

MR BUCKNELL: And in the 2012, the original Plan, they explicitly say that floodplain harvesting is in diversions. But Peta Durham sent out to us the latest models and said that the floodplain harvesting is actually in losses.

MR O'FLAHERTY: Yes.

MR BUCKNELL: But that that diversion figure has stayed the same. And so there is a difference between the without development figure of 400 gigalitres or thereabouts that can't be – can't be explained, and so when you start looking at the amount of water that has been taken not necessarily only by irrigators, but in stocking domestic dams and losses running the dam – dams and all that sort of stuff, that's what we really need to be looking at. Not just the extractions of irrigators, it's the total amount of water.

MR O'FLAHERTY: Total amount of consumptive take, however it's being taken.

35 THE COMMISSIONER: There's on-farm dams, there's floodplain harvesting which needs to be understood as extraction - - -

MR BUCKNELL: Yes.

40 THE COMMISSIONER: - - - to be put together with what are now called pumping

MR BUCKNELL: Yes.

45 THE COMMISSIONER: --- in order to understand what is being made available for consumptive use not all of which is irrigated agriculture.

MR BUCKNELL: Yes. And in the Macquarie the floodplain harvesting isn't licensed and there's a great debate but - - -

THE COMMISSIONER: What's the debate about?

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- MR BUCKNELL: Well, it's not licenced but in the Water Sharing Plans it is said that it is explicitly in the Plan but it's not actually licensed.
- THE COMMISSIONER: Yes, but why not? What's the debate about? Why wouldn't one want to know the scope of floodplain harvesting and why wouldn't you want to have a limit? And if you have a limit that means a licence. That is a permission to go so far as no further. Is there really any debate about that?
- MR BUCKNELL: There is no debate except it is commonly believed that the amount that has been floodplain harvested is much greater than what the licences will actually be.
 - THE COMMISSIONER: So what's the debate about? People don't want to end up with less water than they're presently enjoying.

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- MR BUCKNELL: Yes.
- THE COMMISSIONER: Why is that a debate, the whole Water Act says we've been over-extracting.

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MR BUCKNELL: The history of New South Wales, I will call it the Department of Water Resources, but it's all their names after that, have – if you go right back to the beginning, they weren't there to do a social or an economic or an environmental or a productivity development. They were there to develop irrigation.

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- THE COMMISSIONER: Yes.
- MR BUCKNELL: And this is where the problem is.
- 35 THE COMMISSIONER: The Water Act tells us in section 21 and that was a mistake, we've overdone it.
 - MR BUCKNELL: Yes.
- 40 THE COMMISSIONER: And so we're going to cut it back.
 - MR BUCKNELL: We've got to cut it back.
- THE COMMISSIONER: We're going to cut it back but only to the point where the environment is no longer has its values compromised.

MR BUCKNELL: Yes.

THE COMMISSIONER: Nothing about restoration to pre-development. We're still going to have a lot of development.

MR BUCKNELL: Yes.

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THE COMMISSIONER: But only to the point where taking more would compromise the environmental values.

MR BUCKNELL: Yes.

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THE COMMISSIONER: And section 21 says there's a fact – it uses the word "fact" – Parliament says there's a fact we've used it too much.

MR BUCKNELL: Yes.

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THE COMMISSIONER: I'm sorry, I'm getting more and more impatient as I get older. Why could there be a debate about whether there has to be a cutback? Parliament has said there will be a cutback.

20 MR BUCKNELL: We agree completely.

THE COMMISSIONER: I know you can debate what Parliament says but what I'm saying is unless you want to change the Water Act, I don't understand.

MR BUCKNELL: Because we're running – have for 50-odd years run under the New South Wales situation, what has developed – what's the best way to put it – if I said originally we were making a cake and the first egg we put into that cake mix - - -

THE COMMISSIONER: Just don't say "just add water".

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MR O'FLAHERTY: Just add flour.

MR BUCKNELL: Sorry, I won't add water, no. The first egg we put in the mix was bad. Then it doesn't matter what you do to that cake, it doesn't matter where you give your birthday party, you have Smarties or you put ice-cream or different icings, and all that sort of stuff, that cake forever will be bad. Then the Water Act came along and it is a different cake and so the two can't mix or if they do you will have two bad cakes.

THE COMMISSIONER: That's why the process that I've been asked to look at in terms of its likely success of making Water Resource Plans which are, as it were, the local detailed manifestation of the Basin Plan with their environmental watering requirements, seems to be so important because whatever efforts are made to interlock it with the State regime, there must be a water resource plan. And it must comply with the Basin Plan which in turn must comply with the Water Act. All of which, whether New South Wales likes it or not, is a matter of Commonwealth law and presumably intended by New South Wales to be so because it referred legislative

powers, at least in part in order to enact all of these things. Which is why I say, somewhat impatiently, where's the debate, the Parliaments aren't looking to change these laws.

- I am a lawyer. That's something I am expert in, that is, I can see where I fear a breach of the law coming up. Now, I can also as a Royal Commissioner ask is the law a good idea. But no one, not a single person has come here to say that the legislated fact in section 21 is wrong, it's not true, we haven't overused the waters. Now, that's pretty significant I would have thought. In other words, I think that in many ways the irrigators have been given a bum rap in terms of certain publicity about controversy concerning water. It's not true that en bloc irrigators line up to say give me more, give the environment less. That seems to me to be a travesty of the position of a lot of them.
- MR BUCKNELL: I come back always to a 20/80 rule. It seems to cover lots of things. And I believe 80 per cent of the irrigators are very, very good people and want the environment and want to preserve things and look after things.

THE COMMISSIONER: Yes.

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MR BUCKNELL: It's the limited 20 per cent that are doing 80 per cent of, unfortunately, the - - -

THE COMMISSIONER: The bad eggs in the cake.

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MR BUCKNELL: Yes. Yes.

THE COMMISSIONER: Well, could I ask you about the WRP. Is the Association currently engaged in consultation about that or have things gone quiet or what?

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MR HALL: Yes. I have a seat on the table in the Stakeholder Advisory Panel in New South Wales.

THE COMMISSIONER: How is that going?

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MR HALL: Where do I start? It's – it didn't actually get its legs how I believed it should have. I was given a seat at the table, don't get me wrong, I do appreciate being engaged and I pass that information onto our community, but the 2004 Water Sharing Plan that the Macquarie is currently operating under was due for review, but the New South Wales Minister at the time chose not to give us an opportunity to have a review. There were things that could have been improved and it's very likely that as a wider community the irrigators are – the environment and the rest of the stakeholders were close to getting an agreement. But we weren't given an opportunity during that process, the review – –

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THE COMMISSIONER: What years are we talking about now?

MR HALL: We're talking 2015, 14/15.

THE COMMISSIONER: So has it been, as it were, overtaken by the WRP process?

5 MR HALL: Yes. So we didn't receive an opportunity to review the Water Sharing Plan it was just rolled over. The Water Sharing Plan is a document sitting underneath the Water Resource Plan so - - -

THE COMMISSIONER: Well, the Water Sharing Plan is the State instrument.

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MR HALL: Yes.

THE COMMISSIONER: So the Water Resources Plan has not yet happened. But it's a Commonwealth instrument, and I take it the WSP provides at least a point of departure in producing the WRP. Is that how it's happening in your area?

MR HALL: That's right. But there is quite major parts of our existing Water Sharing Plan being removed to make the Water Resource Plan and for us as an Association – I'm not representing our Association. I'm representing – on that committee, I'm representing the environment Water Advisory Group with another member, but there's purely simplistic processes like the make-up of our environmental Water Advisory Group is threatened by the Water Resource Plan development.

25 THE COMMISSIONER: How is that?

MR HALL: It's removed, and one of the reasons is - - -

THE COMMISSIONER: So that was a group used for the processes of the Water 30 Sharing Plan?

MR HALL: Still is.

THE COMMISSIONER: Which will not be reproduced in the Water Resources Plan you think?

MR HALL: It ---

THE COMMISSIONER: Because it hasn't been made yet, the WRP, has it?

MR HALL: I believe it's in draft and it's quite close to being presented to us, but

THE COMMISSIONER: It's presented to you, the Stakeholders Advisory ---

MR HALL: Panel.

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THE COMMISSIONER: Panel.

MR HALL: And then goes on public.

5 THE COMMISSIONER: And then goes to the public.

MR HALL: Yes.

THE COMMISSIONER: And then eventually, perhaps, goes to the Authority for accreditation.

MR HALL: Goes to the Basin Authority.

THE COMMISSIONER: MDBA for accreditation.

MR HALL: Yes.

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THE COMMISSIONER: And then in theory goes off to the Minister for making.

20 MR HALL: For signing off.

MR O'FLAHERTY: The Authority makes recommendation for the Minister to accredit.

25 MR BUCKNELL: So - - -

THE COMMISSIONER: Accreditation is not the last step though, is it? as an instrument.

30 MR O'FLAHERTY: I think the - - -

THE COMMISSIONER: It doesn't matter. the details of it. So the point is that this is – we're nearly September '18. Have you been told when you will be given a draft, that is, the Stakeholders Advisory Panel?

MR HALL: I haven't been told as such but we do have a meeting coming up on 20 September, so I have made an assumption that we will see a draft copy then?

THE COMMISSIONER: Really?

MR HALL: But like all the process right back through to the original review of the Water Sharing Plan, we are not given meeting documents in enough time to – for me to process.

45 THE COMMISSIONER: Have complaints been made about that?

MR HALL: Yes.

THE COMMISSIONER: What's the response to the complaints?

MR HALL: Workload.

5 THE COMMISSIONER: I'm sorry?

MR HALL: Workload, the department - - -

THE COMMISSIONER: You mean not enough people to do the work?

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MR HALL: Yes. Yes.

THE COMMISSIONER: Have people suggested that more people be employed? I'm serious.

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MR HALL: Look, I don't - - -

THE COMMISSIONER: This is normally one's response - - -

20 MR HALL: Yes.

THE COMMISSIONER: --- to work needing to be done but not enough people being available to do it.

MR HALL: During the time of the development of the Water Resource Plan, the New South Wales department – so under the Department of Industry and Water now, but it was started as office – New South Wales Office of Water – changed name several times but there was a major restructure within that organisation. A lot of knowledge was lost, and it was – to me it was a huge mistake that the combination of the development of the Water Resource Plans and the loss of critical staff that had an opportunity for major input into the development of the plans were removed from

THE COMMISSIONER: Sounds like a false economy.

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MR HALL: Correct.

THE COMMISSIONER: I have to report on the prospects of the WRPs being made on time, which is why I'm asking these questions about your expectations. I take it, this is the very end of August, you have not yet been given the papers for the September meeting?

MR HALL: Not as yet.

MR BUCKNELL: I think one of the problems potentially here is the floodplain harvesting which hasn't yet been decided a quantity or the licensing - - -

THE COMMISSIONER: By which you mean a limit up to which there can be permissions?

MR BUCKNELL: Yes.

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THE COMMISSIONER: Yes.

MR BUCKNELL: And this is my own view, is that that – there is a huge problem there fitting under the cap and if you put the floodplain harvesting in, and so while ever it's - - -

THE COMMISSIONER: Why is that a problem? I mean, I'm being slightly facetious there. Why is it a problem for people to comply with the law?

15 MR BUCKNELL: Because the usage is above the cap?

THE COMMISSIONER: So why is that a problem? That just has to stop, in other words.

20 MR BUCKNELL: Under the Commonwealth Water Act it does.

THE COMMISSIONER: Yes.

MR BUCKNELL: Not under the New South Wales regime.

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THE COMMISSIONER: I don't think people quite understand; if a law that binds you stops you from doing something, it doesn't matter that another law might not be interested in stopping you, particularly when the first is a Commonwealth law given paramountcy under section 99 of the Constitution. I'm sorry, it's just not a problem.

- If Commonwealth law says you can't do something, it doesn't matter whether State law says nothing about it or purports to say you can do it, because if it is inconsistent with a Commonwealth law, there's an end of it. It's invalidated to the extent of that inconsistency.
- MR BUCKNELL: I want to thank you. What you have just said to me has justified my thoughts and arguments for years and years and years.

THE COMMISSIONER: That's not very profound or complex constitutional law.

40 MR O'FLAHERTY: To a constitutional lawyer, that is.

MR BUCKNELL: Yes. But for someone who has been bashing their head up against the wall for 20 or 30 years to actually have someone come out and say, "Hang on, I've got a feeling you might be right" is enormously significant to me.

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THE COMMISSIONER: In any event, I am sympathetic with the idea that the WRP process intended to be achieved by the middle of next year is one which, and I

think in Victoria it's even more momentous, it's one which is requiring the melding of long-established State systems with this new admittedly derivative Commonwealth position and I don't underestimate the difficulty. Indeed, I think even with a fully manned set of departments it would be a stretch to achieve this well by the middle of next year. But that's why I'm so interested in how the progress is going. If floodplain harvesting uses – I think I'm well and truly persuaded by you two it must be an important and difficult topic – then it's obviously significant that the Advisory hasn't got any papers on how to solve it by the end of August; isn't that right?

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MR HALL: Yes, that's correct, and this is a norm. And we've - it's not just our representatives on that group, it's a broader cross-section, including the irrigation representatives, that none of us have been given enough time to not only read the documents but have a - have a good, informed input into the process.

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THE COMMISSIONER: Well, now, at the moment I take it in physical terms in your area there is – there is no system being practiced to measure the volume of water that could be described as floodplain harvesting.

20 MR BUCKNELL: No, no official measurement, and when you say - - -

THE COMMISSIONER: I'm not saying it can't be done. I'm just saying it's not being done at the moment; is that right?

MR BUCKNELL: Yes and no. Officially no, it's not being done. And we've got to remember, we're not just talking floodplain harvesting; we're talking about overland flows and we're talking about stormwater catch. So can I put them all together?

THE COMMISSIONER: Yes.

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MR BUCKNELL: But I would imagine the irrigators would know to the teaspoon how much water is in their reservoirs because they have to do, like me in agriculture running cattle, I have to go to my bank for ongoing funding and that sort of thing, and I have to do a cash flow justifying my income and my expenditure and where it all comes from. I would imagine that cotton growers – irrigators, sorry - - -

THE COMMISSIONER: Is it all cotton?

MR HALL: In Macquarie Valley.

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MR BUCKNELL: Let's say mostly. Nearly all, but, you know, there would be odd bits.

THE COMMISSIONER: I don't want to demonise cotton growers. crops will do for me.

MR BUCKNELL: Yes, so when they go to their bank manager and do their cash flow, the bank manager knows everyone else – all the other clients, what they're doing, that sort of thing. So if I turn round and say my cattle are going to put on five kilos a day, he turns round and says this figure doesn't quite add up. And so if I am an irrigator, let's say a cotton producer says I'm going to produce so many bales off this much water, because that's what my licence is, he's going to say that doesn't add up. And then the person doing floodplain harvesting says, "But I have floodplain harvesting", and "How much water have you got there?", "I've got this much water, which will produce this much cotton, and create that much income." And so the figure is known by the grower and the banks.

THE COMMISSIONER: Anybody is doing something sufficiently ordered to be called floodplain harvesting will know the size of his or her reservoir and will have some experience of evaporative loss before consumptive use in order to have an estimate of the productive resource available. In order, as you say, to be able to answer questions from the ideal bank manager that you've just described.

MR BUCKNELL: Yes. These – the cotton industry is an extremely well managed industry. They are perfectionists.

THE COMMISSIONER: Our national industry is said to be, including by themselves, the most irrigation water efficient cotton growers in the world, a boast which you couldn't make unless you had done the measurements. You couldn't do the measurements unless you knew how much was being deployed and you wouldn't be able to do that for irrigation water without being able to measure floodplain harvesting. So your yes and no means it's not being done officially. That is for the regulatory system, but, of course, it is being done for the business management commercial purposes of the individuals in question.

30 MR BUCKNELL: Yes. Yes.

MR HALL: And what's – sorry. What's often overlooked during this discussion is the floodplain harvesting is quite a rare event. It's only during a flood. So in the Macquarie it's only - - -

THE COMMISSIONER: Again, we're using – by floodplain harvesting we include things that might be slightly different topography from a plain, so storm water and

40 MR HALL: Overground flows.

THE COMMISSIONER: Overground flows. Yes.

MR BUCKNELL: Yes.

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- MR HALL: Yes. But we're talking 2010, 2012, 2016 so after the 2016 Bill I was asking regularly for volumes of to the department, volumes extracted, and at no stage did they even offer a range. So it hasn't been made public at any stage.
- 5 THE COMMISSIONER: In your area, are the earthworks carried out for the purpose of storing the harvested flows, do they require planning permission?

MR HALL: Yes, they do. Well - - -

10 THE COMMISSIONER: What I'm saying is local government records would then have quite precise records of at least constructed storages.

MR O'FLAHERTY: Levies and dams.

15 MR HALL: Yes, but it gets a little - - -

THE COMMISSIONER: If they've been done lawfully, that is.

MR HALL: That's correct. But it gets a little more complex than that because part of the Commonwealth infrastructure efficiency program in the Macquarie that the Macquarie irrigators embraced and saw as an opportunity to improve their infrastructure, the storage height was increased.

MR O'FLAHERTY: It still needed the development approval though.

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THE COMMISSIONER: Did the local government have to give planning approval for that?

MR HALL: Look, local government – so we're talking - - -

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THE COMMISSIONER: Because some developments, as you know, are permitted without the need to obtain consent.

MR HALL: That's right.

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THE COMMISSIONER: I'm just wondering is that the true - - -

MR HALL: No, it gets – developments on the floodplain that we're talking about, as long as they fit roughly within the criteria they're right to go ahead.

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THE COMMISSIONER: Without a consent.

MR HALL: We're talking a large distance from town, like 100 k from town, so the storages were raised and deepened. So to - - -

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THE COMMISSIONER: So would there be records of that at local government?

MR BUCKNELL: I doubt at local government. The department should have records. On the - - -

THE COMMISSIONER: On the basis that what, they control whether you are able to do that or simply that they describe what's going on?

MR BUCKNELL: I can't answer the question. I'm sorry.

MR HALL: So the existing works were used by industry to manage their water use.

So it could be water reticulation, that it ends off the end of a field or it could be to

THE COMMISSIONER: So they're reservoirs and the water could come from different sources.

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MR HALL: That's correct. Harvest supplementary access water because there's water in the Macquarie that's issued over and above the general security entitlement so they're existing works.

MR BUCKNELL: When I was on the floodplain management plan for Narromine to Oxley which covers basically the irrigation area, the – it was decided that above Warren banks heights had to be at 1990 flood levels but below Warren they could be unlimited height. Any height. Go to the moon if you wanted to. So your storages – your question about how tall can they be, it is my understanding is that that's unlimited.

THE COMMISSIONER: Well, does that suggest that in order to be able properly to – I mean halfway decently in order to deal with floodplain harvesting or large storages in making a good Water Resources Plan something in the nature of an audit, that is, thorough inspection and accurate description of everything in the area has to be carried out?

MR BUCKNELL: Absolutely. Yes.

35 THE COMMISSIONER: Sort of a Domesday Book for irrigation.

MR BUCKNELL: Yes. Yes.

THE COMMISSIONER: I must say that doesn't strike me as particularly startling or imaginative comment by me, that is, it just seems to me that before you start regulating something it would be a good idea to know the facts of the situation. Has that been raised at these Stakeholder Advisory Panels that we ought to find out what's going on in order to work out how to regulate it?

MR HALL: We are not given an opportunity to bring up any questions about floodplain harvesting. We're being told that - - -

THE COMMISSIONER: Why is that?

MR HALL: We're being told – and the policy has been consistent right through – the take is capped at 2008 development levels.

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THE COMMISSIONER: And so?

MR HALL: But we don't have a volume because the water wasn't measured. So

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THE COMMISSIONER: So why is that an answer to your question, if you've asked it, about why don't we get information about floodplain harvesting and its extent?

15 MR HALL: No, I'm unable to answer.

MR BUCKNELL: Can I add a bit more to that? The floodplain management plan I was on from two thousand – from the beginning – it was '99/2000 somewhere there through to 2009/10 in that area, there was meant to be a consensus committee and at the end I did not give a consensus. But saying that, we were meant to do property inspections of hot spots and that sort of thing. Now, I was barred from going on those inspections. So I can't tell you anything about them because I haven't seen them but that gives you some – I was seen as the enemy. I was downstream and any water that went past the irrigation industry is seen as a loss to the industry. So I was very limited. I was on the committee but I never got to see anything on ground.

THE COMMISSIONER: I'm sorry. I haven't finished my inquiries in this direction, but I think we will take a break until 10 to 12. Thank you, gentlemen. See you back here at 10 to 12.

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ADJOURNED [11.35 am]

35 **RESUMED** [11.51 am]

MR O'FLAHERTY: Commissioner, you indicated you hadn't finished on the topic of floodplain harvesting so I will continue the reins in your hands, I think.

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THE COMMISSIONER: Have I understood correctly that what you two think requires careful attention in the making of a WRP in relation to floodplain harvesting is the method by which take in that form is counted towards the SDL for the area?

45 MR HALL: Long-term extraction, that's right.

THE COMMISSIONER: Yes.

MR BUCKNELL: And if it hasn't been measured, how can it be accounted for?

THE COMMISSIONER: Yes. And involved in that concern, I take it, is the expectation that a large proportion of that which is floodplain harvested, in the extended sense, would, but for the harvesting, go back to the channel?

MR BUCKNELL: Yes. Yes.

THE COMMISSIONER: Or go to the channel or go back to the channel - - -

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MR BUCKNELL: Yes, yes.

MR O'FLAHERTY: Or into the groundwater.

15 THE COMMISSIONER: No, some will go into groundwater.

MR BUCKNELL: Yes.

THE COMMISSIONER: And some will be used consumptively in the ordinary 20 way, that is, the equivalent of rainfall or overflow.

MR BUCKNELL: Yes.

THE COMMISSIONER: But the point about floodplain harvesting is that it 25 intercepts the natural travel of the water back to or towards the channel.

MR BUCKNELL: Yes. Yes. Absolutely.

THE COMMISSIONER: No doubt there are what some people call losses by reason of evaporation or transpiration or whatever on the way and as Mr O'Flaherty 30 has pointed out, some of it will be in the form of localised recharge of groundwater but by and large, that which as stormwater or bank-breaking overflow able to be harvested and stored would, but for that opportunity being taken, go back to the river.

35 MR BUCKNELL: Yes.

> MR HALL: One of our problems in the Macquarie is delivery of the environmental water, the restriction heights on that within the Water Sharing Plan. And - - -

40 THE COMMISSIONER: What, in some other context they call a constraint.

MR HALL: Exactly, so it's capped at a figure. There's a few variations. If we're in translucency we can go a bit higher, but there's an area of land on the outside perimeter of the Macquarie Marshes that is more of a floodplain-type flow regime that receives beneficial flooding occasionally.

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THE COMMISSIONER: What, once every 10 or more than that?

MR HALL: We would be looking at a bit less. It was impacted by the reduced flows into the Marshes because the Marsh is wet but the water just gradually pushes out in that – the core area will be wet and then it will gradually push out to those flood plain areas. That's likely to be the area that's impacted the most by floodplain harvesting and that area we're speaking about has the scientific evidence to show that it, when it does respond it is the response of the microinvertebrates and all the bugs in the ecosystem explode because of – for generations they've – they've evolved relying on those occasional flows. Much more like the floodplain along the Barwon-Darling system rather than the core Marsh area.

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MR O'FLAHERTY: To put that into context, I think this is explained in one of the documents you've provided. That's behind tab 2. That's a document which is entitled 'Beef Productivity of the Macquarie Marshes', and if you go at page 3 – this is page 3 and 4, where the floodplain mapping is, or the flooding mapping is described, and I think what you were just describing, is that the blue areas in terms of the ones that get flooded less frequently? I think it's every two and a half years under natural conditions.

MR HALL: That's right.

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MR O'FLAHERTY: That's over the page.

MR HALL: It is a little confusing, because we have changed our inundation areas, the colour coding has changed.

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MR O'FLAHERTY: Right.

MR HALL: Yes, we are talking the blue.

30 MR O'FLAHERTY: At least we got colour this time.

THE COMMISSIONER: So we're talking a mixture of River Red Gums, Lignums, Coolabahs, Black Box, Myall Beah. That's the trees.

35 MR BUCKNELL: Yes. Yes. Yes.

MR O'FLAHERTY: So it's that area that is most impacted upon by floodplain harvesting, the broader area rather than the area – the smaller areas, the purple through red which seem to be more localised around the streams.

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MR BUCKNELL: Yes, and if you refer back to the site flow indicators, there's one, two, three and four. There needs to be a correction on number one, which Garry can explain, but the environment water really can only satisfy us, or go close maybe satisfy a site flow indicator in level number one.

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THE COMMISSIONER: I see. So you need then to experience what I call natural flooding in order to get the - - -

MR BUCKNELL: Yes.

THE COMMISSIONER: The more remote - - -

5 MR BUCKNELL: Yes.

THE COMMISSIONER: - - - associations being watered.

MR BUCKNELL: That's right.

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THE COMMISSIONER: At what they need, which is less often, but still more often than they can, now that we have floodplain harvesting.

MR BUCKNELL: And - - -

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THE COMMISSIONER: Is that – have I got it?

MR BUCKNELL: And the dam. And the really big floods that haven't been able to be completely captured yet are still having an effect in the Marshes. It's the floods between site flow indicator one, which is the environmental flow which is just a flow, and the really big flood. So it's the medium floods which are the ones that are being impacted between a combination of floodplain harvesting and the dam structures.

25 THE COMMISSIONER: Yes. I see. Yes.

MR BUCKNELL: Earlier we were talking about the cash flow things to go in with banks and how the amount of water was known by irrigators to be able to take that to the banks.

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THE COMMISSIONER: Yes.

MR BUCKNELL: The banks are then able to use that as collateral.

35 THE COMMISSIONER: Yes.

MR BUCKNELL: But then they must also know if that water is being taken by floodplain harvesting, that water is not available to their downstream customers. This is the banking customers.

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THE COMMISSIONER: Yes, I see.

MR BUCKNELL: And so they must also know that they are taking collateral away from everyone downstream. And so they are deciding between different groups in society who can have money and who cannot have money, who can borrow.

THE COMMISSIONER: Maybe there's another Royal Commission interested in that.

MR BUCKNELL: I'm sure you have his phone number. And if he needs us we can – more than happy to go.

THE COMMISSIONER: Well, now, on page 3 of your submission to me, towards the middle of the page, the third last dot point reads:

Water New South Wales becoming more efficient has seen a dramatic reduction in surface flows reaching the Marshes.

Can you unpack that for me, explain what that means?

MR HALL: Yes. So this is very relevant right now because it's exactly what we've been through in the last eight months. So in the regulated section upstream of the Marshes there is a flow – a small flow that's directed down that stream to provide mainly stock and domestic use for the houses that are – that are built along that stream, and it ends at Pillicawarrina, which is the gauge halfway through the Marshes, into the regulated reaches of the Pillicawarrina gauge.

THE COMMISSIONER: Regulated by weirs, you mean.

MR HALL: Sorry, the regulated reach is a term that's used from managing the streams that have a constant flow from Burrendong dam. We're talking not from internal structures; this is from Burrendong itself.

THE COMMISSIONER: The regulation in question is Burrendong.

30 MR HALL: That's correct.

MR BUCKNELL: And for regulated irrigation.

MR HALL: That's right.

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- THE COMMISSIONER: You're using the word "regulated" in two different senses: a regulated river because there's a dam, and regulated irrigation because it has got rules.
- MR HALL: No, it's the same, so general security licences were only issued on the regulated reach. So back to where I was, regulated section, it ends at Pillicawarrina, the water use efficiencies that I refer to in my submission has been the reduction in the daily flows. So Water New South Wales have what was called a Customer Service Committee made up of predominantly irrigators that advise Water New
- South Wales on their operations, day-to-day operations. Reliability of general security entitlement in the Macquarie, and I've heard its other valleys have a downward trajectory, more demands on the water because the system is so badly

over-allocated. So Water New South Wales are constantly receiving advice from their customers of how to tighten the ship up, less wastage of water, so as more water can be used by licence holders.

5 THE COMMISSIONER: And how is the – what is the actual means by which there's tightening up to avoid wastage.

MR HALL: So for the last eight months they've been using blocked releases in the lower section of the regulated reach.

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THE COMMISSIONER: Can you explain that to me?

MR HALL: So rather than a constant daily flow down the stream released from Burrendong, they've turned it off at the Marebone weir and let it dry out for up to 12, 15 days and then put a two to three day pulse through that stream.

THE COMMISSIONER: And that helps how, because - - -

MR HALL: Water savings. They've calculated that rather than the flow going 24 hours a day seven days a week.

THE COMMISSIONER: They only release it when people are ready to pump it.

MR HALL: There have been no consultation with the landholders, we're not talking general security irrigators here, we are talking landholders who are members of our Association who have a pump in the river for watering their garden and filling up their - - -

THE COMMISSIONER: Stock and domestic.

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MR HALL: Exactly. So no consultation, Water New South Wales made a decision that they could have some water savings for this to increase.

THE COMMISSIONER: So it's pulsed rather than continuous - - -

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MR HALL: That's right.

THE COMMISSIONER: --- so as to save ---

40 MR HALL: Reduce losses.

THE COMMISSIONER: --- water, but they pulse it as it were, just to keep the river alive.

MR HALL: Well, they accept that there's a need. People – critical human need. People reside in that section of the river and have so since settlement, on the

understanding that that was a regulated flow. Properties have regularly changed hands.

THE COMMISSIONER: I'm just wondering how that meets or matches environmental outcomes.

MR HALL: Two – okay, so I will tie that in with my submission. How that's impacted on, and the delivery of environmental water in the Macquarie is that once they get to the Pillicawarrina gauge the water just doesn't stop. It has ongoing benefits. It keeps the next water hole full and flows into the north Marsh reed bed which is the largest reed bed in the Murray-Darling Basin, Ramsar site. It's an understanding that there are small environmental benefits as a result of the delivery of that regulated flow within the regulated reach of the Macquarie.

15 THE COMMISSIONER: But when you go to this - - -

MR HALL: Block releases.

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THE COMMISSIONER: These block releases, there is a smaller volume coming through to perform that environmental function; is that correct or not?

MR HALL: That's correct, but we need to make it clear that there's no obligation from Water New South Wales for those environmental benefits.

25 THE COMMISSIONER: No, I understand. You used the expression "surplus flows".

MR HALL: That's correct.

30 THE COMMISSIONER: The word "surplus" means over and above what?

MR HALL: Over and above the flow within the regulated reach. So Burrendong dam has tributaries - - -

35 THE COMMISSIONER: Surplus over what irrigators need?

MR HALL: Correct.

MR BUCKNELL: Yes. Yes. So ---

THE COMMISSIONER: I don't call that a surplus, but anyway.

MR HALL: That was - so - -

45 THE COMMISSIONER: I understand.

MR HALL: A general security irrigator doesn't just access water from the dam. If they put an order in, launch a water order, and there's a storm go across other section of the catchment downstream of the dam, rather than releasing that water from Burrendong, that water order is filled from the flows from the downstream tributaries.

THE COMMISSIONER: Permission to pump.

MR HALL: That's correct. But water – in my submission I state that Water New South Wales have improved their efficiency so there is less flows, just being let go, because when it - - -

THE COMMISSIONER: I understand. So the efficiency in question is from the point of view of seeing the river as an irrigation deliverer.

MR HALL: Correct.

MR BUCKNELL: Yes.

20 THE COMMISSIONER: And ceasing to see it as a river.

MR BUCKNELL: Yes.

MR HALL: And it's putting more demand on the - - -

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THE COMMISSIONER: I think I

MR HALL: --- environmental water so – so flows arriving at Pillicawarrina gauge 10 – 15 to 20 years ago, it was a given that it was 200 megs a day. That was operational surplus. It was accepted.

THE COMMISSIONER: I find the word "surplus" really strange and distorting, but I do understand what you mean by it now.

- MR HALL: It has gradually been reduced now, like we're feeling pretty fortunate. If it's 10 megs a day they're very efficient with what they do. River operations of Water New South Wales are an efficient organisation. And 10 megs a day right down to the last eight months with extended periods of no flow. Now, as I said, there's no obligation for Water New South Wales to provide that ongoing benefit to the environment, but in my world, the environmental outcomes have been measured by that water that was already arriving in the section of the north Marsh. That has been removed.
- THE COMMISSIONER: Doesn't all that have to be addressed in the Environmental Watering Plans in the WRP?

MR HALL: There's no – been no discussion about this issue. It has been overlooked. The Marshes have - - -

THE COMMISSIONER: But isn't that exactly what an SAP is for, to give advice on that kind of thing.

MR HALL: Exactly.

THE COMMISSIONER: Has it done it yet, in your area?

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MR HALL: There has been some issues raised, but I'm yet to hear where it settled, and not having seen the draft copy of the Water Resource Plan, I don't know where we're going.

15 THE COMMISSIONER: Now, a propos to that, can my Commission staff be in touch with you to get an update after your next meeting?

MR HALL: Sure. Yes.

MR O'FLAHERTY: I wanted to ask some questions about the more broader yearly trend that you point to, I think, in your submission about the fact that the Marshes themselves are receiving less – reduce the flows over a year-by-year basis. You've provided the Commission with a series of gauge readings. That should be behind tab 3. Just to sort of understand, so that I – I have a correct interpretation of it, you make mention in your submission of the construction of the Burrendong dam that I think was between 65 and 68; is that correct? Right? And, broadly speaking, taking these readings as a whole, particularly from, if I could say it's from 2002 onwards, what seems to be the trend is less what one might call medium – at medium flows in a sense - - -

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THE COMMISSIONER: By the way, what is this recording?

MR O'FLAHERTY: Sorry. This, I understand, is a gauge data.

35 THE COMMISSIONER: What does Hydstra mean?

MR O'FLAHERTY: Is that maybe the company that - - -

MR HALL: No, I think that's the data that – the name of gauge but I don't know if it was right back in 1939.

MR O'FLAHERTY: Yes.

THE COMMISSIONER: It's a location, is it?

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MR HALL: No, sorry, this is Bells Bridge gauge so this is - - -

THE COMMISSIONER: So what does H-y-d-s-t-r-a mean?

MR HALL: I'm not sure.

5 THE COMMISSIONER: It looks like it's some snappy term to do with water, I presume. Anyway, so you don't know what that means.

MR HALL: No.

10 THE COMMISSIONER: And what are the units here?

MR HALL: Megalitres per year.

MR O'FLAHERTY: Megalitres, yes.

15

THE COMMISSIONER: Megalitres per year, what, discharge at that point?

MR HALL: Flowing past that gauge.

20 MR O'FLAHERTY: And whereabouts is that gauge?

MR O'FLAHERTY: So that's at Bells Bridge which is the only gauge downstream of the Marshes - - -

25 MR O'FLAHERTY: Yes.

MR HALL: - - - before the intersection with the Barwon-Darling.

MR O'FLAHERTY: And I think you've explained this to me once before where you would classify a high flow year to be over 60,000 megalitres, a medium flow between 13,000 and 60,000 and a low flow year somewhat under 13,000. That's your – have I characterised or mischaracterised your - - -

MR HALL: No, you're correct, but it was the only way that I could do it. Really at that gauge a high flow should be above 100.

MR O'FLAHERTY: Right.

THE COMMISSIONER: Well, now, this tells a story of variability obviously but to what extent does it tell a story of drought or regulation? Regulation comes towards the end of the sixties.

MR HALL: That's it.

45 MR BUCKNELL: 65/66, yes.

MR O'FLAHERTY: Yes, so we've got a series of years, 65 to 68 which are low because I think that's when the dam was either being constructed and/or filled.

MR BUCKNELL: Yes.

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THE COMMISSIONER: The dam filling – so we have a massive drop from 63/64 to 65/66; is that right?

MR HALL: Yes, unfortunate timing, yes.

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MR BUCKNELL: And that was also a drought as well.

THE COMMISSIONER: Also a drought.

15 MR O'FLAHERTY: Compounding the problem.

MR BUCKNELL: Yes, compounding the problem.

THE COMMISSIONER: Notwithstanding the regulation by Burrendong by '73 and '74 we've got two whoppers, haven't we?

MR HALL: During that period that was pre-development. So what that period shows is - - -

THE COMMISSIONER: So '73 and '74 there wasn't as much annual crop being irrigated.

MR HALL: Virtually nothing. There was irrigation but not on the scale that we're familiar with now. A good year in the Macquarie, there's up to 45,000 hectares of crop land and during those years I would expect it to be well under 5,000 hectares.

THE COMMISSIONER: I see. Right.

MR HALL: That shows - - -

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THE COMMISSIONER: So if we were doing a – more elements in this timeline and we were to add drought and to add Burrendong and to add annual plantings you would begin to see the ways in which you might infer causation.

40 MR BUCKNELL: Yes.

THE COMMISSIONER: I understand. So, for example, the Millennium Drought, where do you date that from?

45 MR HALL: 2002 to 2009.

THE COMMISSIONER: Right. And that's extremely graphic, isn't it, just on this single strand of figures.

MR BUCKNELL: Yes.

5

MR HALL: Comparable only to the period that Burrendong was constructed.

THE COMMISSIONER: Yes, but that's got the overlay of the dam being filled.

10 MR BUCKNELL: Yes.

THE COMMISSIONER: Yes.

MR HALL: So what I – in including this in our submission, what I was trying to explain is that the – this being the lowest downstream gauge on the Macquarie before the water enters the Barwon-Darling is that historically the Macquarie has been an important contributor to the Barwon and the unique factor that the Macquarie is a winter/spring fed catchment.

20 THE COMMISSIONER: Why do you say that's unique?

MR HALL: It's unique because it falls within the northern Basin.

THE COMMISSIONER: I see, sorry.

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MR HALL: Yes, so the Lachlan is headed south. The Macquarie is the last - - -

THE COMMISSIONER: It's relatively unique.

- MR HALL: The Lachlan, Bogan, Castlereagh, that's right. So the winter/spring fed, so the catchment of the Macquarie is mostly, not these last two years, but impacted by the southern fronts coming across when these guys in South Australia get all their rain, and winter/spring rainfall, the river catchment yields the flows that have traditionally supplied the Marshes with those spring, early summer events, but
- then also that water has been making its way through the Marshes to the Barwon-Darling and entering the Barwon upstream of Brewarrina at a time when that section of the river experiences low flows because the northern Basin is impacted by the impact of northern monsoon rains that occur in the summer. So for us, the pattern there is, with this data, that the reduced flows there has been much less water coming
- 40 from the Macquarie and entering the Barwon-Darling upstream of Brewarrina.

THE COMMISSIONER: At a time of low flow.

MR HALL: When it's critical for them, so the Brewarrina township have trouble with their water for the town and I've had it said to me that they can see when the Macquarie water arrives. So the water arriving from the Macquarie, not only does it arrive at a time of traditionally low flows in the Barwon, it's arriving of high quality

water. When I was speaking to the general manager of Bourke Shire, when the water arrives at the Bourke town water their filtration, the daily filtration cost is reduced, and I've also heard that when that water arrives at Menindee they can notice a difference in water quality. So the Macquarie's contribution, while it's not a huge volume of water, it is important to the Barwon-Darling.

MR O'FLAHERTY: Because it comes at a time of need.

MR HALL: And it's good quality water.

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THE COMMISSIONER: This is what I think of as a connectivity point of real importance.

MR BUCKNELL: Absolute importance, yes. Yes. And for quite a while we had a situation where we were being told that the Macquarie – the Marshes were a terminal wetland.

THE COMMISSIONER: Yes.

- MR BUCKNELL: And didn't belong to the Murray-Darling Basin. That argument was pushed and pushed, so much so there were actually maps developed and we had staff from New South Wales Water or whatever it was called back then actually at a meeting telling us that that was the case.
- THE COMMISSIONER: If it were the case then it would be odd to include it in the Basin.

MR BUCKNELL: Yes, we have now passed – what actually happened - - -

THE COMMISSIONER: I mean, it's no longer accepted, as I understand it. Hydrologically it's now a given - - -

MR BUCKNELL: No.

35 THE COMMISSIONER: --- that the Macquarie is legitimately considered part of the Basin because water that falls in its highest catchment can eventually end up in the ocean.

MR BUCKNELL: Yes.

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MR HALL: That was a given until the Northern Basin Review and the over-recovery and the removal of environment water. That water, and I've said this before - - -

45 THE COMMISSIONER: You could stop the Macquarie, no doubt.

MR HALL: Yes.

THE COMMISSIONER: I'm just saying that in hydrological terms I think its connectivity with the Barwon, hence the Darling, hence the Murray is not in doubt.

MR BUCKNELL: Absolutely. But how it – they brought this up at a meeting that we actually had - - -

THE COMMISSIONER: Who brought it up?

MR BUCKNELL: Who was it, blue light - - -

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THE COMMISSIONER: State people or Commonwealth people?

MR BUCKNELL: No, this was - - -

15 THE COMMISSIONER: State people.

MR BUCKNELL: --- 1990 would it be or something like that, and we happened to have a meeting, I think it was a blue light. And after the meeting they were going to the Carinda pub and so we thought we will around there and have a beer with them and that sort. On the way round there they had to cross over the bridges, Bells Bridges, and when we got there we said now, you know that map there where we said that was wrong, there's actually a river on there and they said no, there isn't, then what was that thing you crossed? And they said it's a bridge. Well, what does the bridge go over? And so the reality on ground changed the argument. But they were adamant that they had been told that no, it was a terminal wetland, and so it was the practical thing at that meeting that, you know, that's how the subject changed but we were going to lose that debate academically, and so now it's accepted we are part of the Murray-Darling Basin, of course.

30 THE COMMISSIONER: Thank you.

MR O'FLAHERTY: I wanted to ask you, you make a point in your submission about the deficiencies in the social economic analyses conducted by the MDBA and in the Northern Basin Review. I wanted to perhaps put it this way: we've taken you to the – briefly to the document behind tab 2. What was – what was the – what caused the production of this document? Was this for a particular purpose that you produced this analysis?

MR HALL: Yes. Trying to – in an attempt to explain our case.

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MR O'FLAHERTY: Yes.

MR HALL: And the ongoing benefits from grazing a wetland.

45 MR O'FLAHERTY: And was this – I think I've got an indication that this was around 2015 that this was produced; is that right? So this was during the Northern Basin Review process that you produced this?

MR HALL: Yes.

MR O'FLAHERTY: It was a part of that?

5 MR HALL: A bit earlier.

MR O'FLAHERTY: A bit earlier than that.

MR HALL: Yes.

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MR O'FLAHERTY: Okay. And you've got some figures there which I don't need you to go over too much and the very catchy catchphrase "Fat ducks means fat cattle," and it's the link between environmental flows, environmental outcomes and productivity outcomes on areas such as Macquarie Marshes.

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THE COMMISSIONER: I was worried it meant that cows were eating the ducks.

MR O'FLAHERTY: I think it may be two words too many for the traditional slogans we hear in politics these days. But you make the - - -

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MR BUCKNELL: Could I just correct you just a little bit?

MR O'FLAHERTY: Certainly, yes.

25 MR BUCKNELL: You said there was a link between environmental flows.

MR O'FLAHERTY: Yes.

MR BUCKNELL: It's actually a link between more than the environmental flows, the environmental flows that are happening at the moment are minimal.

MR O'FLAHERTY: Yes, sorry, I used that term loosely. If we – more umbrella term of flows through the Marshes being beneficial to both environmental outcomes and productivity outcomes, that doesn't necessarily just include directed

environmental flows such as releases from the dam. It includes natural flows.

MR BUCKNELL: Yes. Yes.

MR O'FLAHERTY: Yes.

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MR HALL: During the development of the Basin Plan we found ourselves in quite an unusual space, because up until the Basin Plan we had been lobbying New South Wales only because they were the water managers.

45 MR O'FLAHERTY: Yes.

MR HALL: And it was – the debate was quite polarised between the environment and industry, and we were attempting to say, look, there are positive environmental outcomes with production benefits and that's gone on to mean nowadays we all know that community benefits of having a healthy river system.

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MR O'FLAHERTY: Yes.

MR HALL: But I would like it to be noted that this was early days when predominantly we were focused on New South Wales issues.

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MR O'FLAHERTY: Yes. In terms of the – you – I think you criticise or you have concerns over the representative nature of the social and economic analysis done by the MDBA throughout the Northern Basin Review. And if I could perhaps – if – could the witness be shown the Northern Basin Review folder?

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THE COMMISSIONER: Just before we – Bell's Bridge is, on page 2 of your fat duck document, there's one of your maps.

MR HALL: Yes. You can see red line headed across to Carinda.

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THE COMMISSIONER: Yes. I can also see the words "Bell's Bridge", but where is the bridge?

MR HALL: The bridge is over the Macquarie River.

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THE COMMISSIONER: Which - - -

MR O'FLAHERTY: Is that a faint line by the large black one?

30 MR HALL: That's it.

MR O'FLAHERTY: That's the river.

THE COMMISSIONER: So Bell's Bridge is more or less where the Macquarie
Marshes planning area boundary intersects with the line of road running west from
Carinda; is that right?

MR HALL: That's right. Sorry, that was quicker than Google, it turns out. Thanks.

40 MR O'FLAHERTY: If I could take you, gentlemen, to the document behind tab 2 and I think page 52 there's some analysis. I understand that your – you have concern that they looked at one system of floodplain grazing for the purposes of their social and economic analysis in the Condamine-Balonne region, but that wasn't representative of – that wasn't truly representative, is that - - -

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MR HALL: We didn't feel it was relevant to our - like, we explained before, the variation between a floodplain and a wetland.

MR O'FLAHERTY: Yes.

MR HALL: And our most valuable resource where we graze our livestock is within the wetland. The key – experience occasional drying whereas a floodplain is much more of a flow than – a large flow and then - - -

MR O'FLAHERTY: Occasional wetting.

MR HALL: Exactly. You're dead right.

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MR O'FLAHERTY: Yes. So it's very much apples and oranges in terms of the type of environmental outcomes and therefore also the type of productivity outcomes.

15 MR HALL: Production outcome.

MR O'FLAHERTY: Yes.

- MR HALL: Not to be dismissive of this, and it is great that somebody has finally accepted that there is other benefits to a river other than water extraction for the environment. There is benefits from floodplain grazing, lake bed farming or Macquarie Marshes grazing.
- MR O'FLAHERTY: Just not the case that they shouldn't have done this analysis; they needed to do more.

MR HALL: Yes, exactly.

MR BUCKNELL: This is the only one apart from our own that has ever been done.

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MR O'FLAHERTY: So in terms of, apart from your own, that's the document I took you to.

MR BUCKNELL: Yes.

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MR O'FLAHERTY: You've only seen those two sets of analyses in respect of what I might call floodplain wetland harvesting.

40 MR HALL: Grazing.

MR O'FLAHERTY: Grazing. Yes. Sorry, I can't use harvesting. Sorry. I meant floodplain wetland grazing.

45 MR BUCKNELL: So over 50 years of development in New South Wales, and we will speak for the Macquarie, there has never been an analysis done of what was downstream there beforehand, and what is there now. So how can you say

something upstream has been so productive when you don't know what you're losing downstream?

MR O'FLAHERTY: Yes. Yes.

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THE COMMISSIONER: In other words you've got a net of productivity unless you do everything through the prism of particular producers, which would be unjust.

MR BUCKNELL: Yes. Yes.

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THE COMMISSIONER: Can I just ask this about this analysis that starts at page 52 of the Northern Basin Review technical overview of the socioeconomic analysis. I take it you two are pretty familiar with the observation and conclusions that you find on those pages 52 to 54?

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MR BUCKNELL: I think I'm probably slightly more familiar than Garry. We're both familiar, but I might be slightly more familiar.

THE COMMISSIONER: Now, the way I read it, it's an analysis that makes pretty clear that a consequence of upstream development, meaning annual crop irrigation, can be one of the consequences can be measured by a reduction in the downstream grazing productivity; is that correct?

MR BUCKNELL: Yes.

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THE COMMISSIONER: As a result, physically, of the reduced, that is reduced frequency, reduced duration, reduced quantity of overbank events.

MR BUCKNELL: Yes.

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THE COMMISSIONER: And if you use the word 'Marsh', you can say that the Marsh doesn't get Marsh-like as often by reason of the upstream development.

MR BUCKNELL: Yes. Yes.

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THE COMMISSIONER: But because the Marshes are wetting and drying cycle, in its drying phase it's a very productive grazing environment.

MR BUCKNELL: Yes.

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THE COMMISSIONER: Is that correct?

MR BUCKNELL: And as you can see when we were looking at those, what we call the blue zone map, the – when the blue zone is wet, obviously the core Marsh is exceptionally wet.

THE COMMISSIONER: Yes.

MR BUCKNELL: So that you have - - -

THE COMMISSIONER: Then as it recedes.

5 MR BUCKNELL: Yes, you have variability.

THE COMMISSIONER: So on page 54, the second last paragraph:

Drought or rainfall only upstream development, little effect on flood plain stocking rates.

Just to interpolate that, I take it you understand to mean people have already destocked?

15 MR BUCKNELL: I'm sorry, I just can't find the - - -

THE COMMISSIONER: See the paragraph, second last paragraph on page 54.

MR BUCKNELL: Yes.

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THE COMMISSIONER: As indicated in figure 11.

MR BUCKNELL: Yes, yes.

25 THE COMMISSIONER: Just picking.

MR HALL: Okay, drought.

MR BUCKNELL: Yes. Yes.

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THE COMMISSIONER: Rainfall only, upstream development, little effect, flood plain stocking rates. Do I take it that means people have already destocked in times of drought etcetera? Or is it - - -

35 MR BUCKNELL: Yes, yes.

THE COMMISSIONER: And I suppose it's also that in those years you don't get overbank flows anyhow.

40 MR BUCKNELL: That's right.

THE COMMISSIONER: So the next sentence they say by contrast where you've got – where nature would give the possibility of overbank flows upstream development reduces the stocking rates by up to 50 per cent or more.

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MR BUCKNELL: In some years, yes.

THE COMMISSIONER: Right. Now, and then that's translated to dry sheep equivalent figures and revenue figures. I wanted to ask you about the paragraph 2 above that commences "two modelling periods". I've had a deal of evidence to and fro concerning the use of long-term averages and the 114 year experience and all of that. And just putting to one side as being unworthy of sensible attention the notion of climate change, I'm interested in how you might explain to me the significance of the division of the 100 year climate sequence into three distinct periods, accepting, and I see no reason to doubt their – the fairness of their generalisation, first 50 years extremely dry, then through to the 60s, much wetter than average, and then

sequences of wet and dry after 65. Isn't that variability a characteristic of the period that is actually used to drive so-called long-term averages?

MR BUCKNELL: Yes.

15 THE COMMISSIONER: So it may mean that a long-term average is really quite unreal.

MR HALL: That's right.

THE COMMISSIONER: But that is the point about a long-term average, that if you're deriving it from data over a period that exhibit variability, then that's the name of the game.

MR BUCKNELL: Yes.

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THE COMMISSIONER: You come up with a figure that will not be typical of any particular period. Again, that's an extremely elementary observation about the nature of an average.

30 MR BUCKNELL: And I would have thought it would have been better to either take the middle figure or the figure that occurred most often.

THE COMMISSIONER: The middle, you mean median.

35 MR BUCKNELL: Median figure.

THE COMMISSIONER: The figure where 50 per cent are above and 50 per cent below.

40 MR BUCKNELL: Yes. Or the figure that occurs most often, which I – there would be a technical name for that too.

THE COMMISSIONER: There is. But the next sentence:

Average annual stocking rates and earnings for the shorter 27 year period better represent.

And then it's said:

...the experience of existing graziers.

5 That seems to be an observation that turns upon the life expectancy of graziers.

MR BUCKNELL: Yes. I think that's probably what a lot of this would - - -

THE COMMISSIONER: Assuming you haven't lost your memory.

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- MR BUCKNELL: Yes. So I suspect a lot of this information was gained from actually asking or it was there was must have been submissions made so that people could actually know go about this process.
- THE COMMISSIONER: What possible significance does it have to understanding the effect of upstream development to tie it to the experiences of existing graziers, unless, as happens to be true here, just by fluke, existing graziers happen to have seen over the course of their entire careers, the huge increase of development? That's the only reason why it seems very odd that on the one hand to be so intent on using long-term averages and on the other hand suddenly to turn to what people still alive can tell you.

MR BUCKNELL: Yes. Yes. But – yes.

- 25 THE COMMISSIONER: In any event, it may mean that these are the figures therefore lend spurious precision to the observation in question, but the observation seems, I gather, incontestable in your experience that upstream development does reduce the flows in the Marshes, which in turn reduces the grazing productivity.
- 30 MR BUCKNELL: Yes. And one thing to - -

THE COMMISSIONER: It is a simple as that, isn't it?

MR BUCKNELL: Yes. And - - -

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THE COMMISSIONER: And that's leaving the environment out at the moment but just in terms of productivity downstream and your point I think is why would one look at upstream productivity without looking at the downstream reductions in productivity - - -

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MR BUCKNELL: Yes.

THE COMMISSIONER: --- on account of upstream productivity.

45 MR BUCKNELL: Yes. But one – to add to that, the Macquarie is in a rare situation that the river runs to the north into a summer – towards a summer rainfall area. So when the rest of the river, say, the Balonne is in drought its catchment is potentially

most likely in drought as well. Whereas in the Macquarie, we have a situation that the catchment is around Bathurst is in the winter rainfall area, but the Marshes are closer to a summer rainfall area. So outside the Marshes can actually be in drought when the river is getting a flow. And it's not necessarily a big flood. It's one of those medium-type floods so it actually became the drought reserve.

THE COMMISSIONER: So water is being brought to a vicinity that is generally affected by, I will call it northern drought, from relative wet in the south.

10 MR BUCKNELL: Yes. Yes.

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THE COMMISSIONER: Well, now, you've criticised, I think, the focus of these pages 52, 53, 54 on – it's the Lower Balonne, isn't it?

15 MR BUCKNELL: Yes.

THE COMMISSIONER: But I gather that the – in broad terms of reasoning is reasoning you think applies to the Macquarie Marshes as well, namely, it follows that increased upstream development will reduce downstream development when the relation between the two is irrigation for annual cropping first, and overflow grazing.

MR BUCKNELL: Yes.

THE COMMISSIONER: Overflow-fed grazing for the second.

MR BUCKNELL: Yes. Can I explain - - -

THE COMMISSIONER: That relation is true for the Macquarie Marshes as well as for the Lower Balonne, is it?

MR BUCKNELL: Yes. What happened, we wanted an independent unbiased study – economic study done. We had done one ourselves but everyone quite rightly said you're biased and so we wanted an independent one done. So when this happened

MR O'FLAHERTY: The broad proposition the Commissioner is putting to you is right but you want more than just a broad proposition, you want that further detail.

THE COMMISSIONER: You were being fussy, you wanted the facts.

MR BUCKNELL: Yes, we wanted facts. And when this occurred we went to a meeting in Warren and the guy who did this modelling, his name was Phil Townsend

45 MR HALL: Yes. From the Authority.

MR O'FLAHERTY: From the Authority. And immediately after the meeting we approached him and said can you please come and do one in the Macquarie. We want one done. And he said well, I would love to but I don't think the funding is there but I will try and get there at some stage in the future. I said can I use your parameters here and use it in the Marshes but we think the Marshes are more affected

THE COMMISSIONER: Because of the particular feature of the Marshes by which, with the wetting and drying cycle you have this - - -

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MR BUCKNELL: Yes.

THE COMMISSIONER: --- really striking capacity to graze.

15 MR BUCKNELL: Yes, and we're a marsh so when the - - -

MR HALL: As opposed to a floodplain. A marsh is - - -

THE COMMISSIONER: No, I do understand. Very much, yes. Do you recall what his response to that inquiry was?

MR BUCKNELL: His response was yes, he thinks it's worth doing but he said that to use his figures indicatively and that's why, if you've ever seen anything I've done, I've stressed the word "indicatively" to use to give people - - -

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THE COMMISSIONER: To avoid what I call spurious precision.

MR BUCKNELL: Yes.

THE COMMISSIONER: You use figures and you've got to be careful that you're not conveying that you have been able to measure things sufficiently in order to suggest this is a true measure as opposed to an indicative estimate.

MR BUCKNELL: Yes, and that's why I've always stressed to everyone that it's indicative.

THE COMMISSIONER: I see.

MR HALL: There are – it is complex and as I say, we are excited that this study has actually taken place because for us it's the first of a kind. We think that it's minimalistic, the impact there, that it would have had - - -

THE COMMISSIONER: That's fine.

45 MR HALL: --- in the Macquarie Valley. But it's quite difficult and we've spoken at length to Phil Townsend about this. The water isn't removed from the river system when it arrives to the Marshes. It floods out and ---.

THE COMMISSIONER: It's flow through.

MR HALL: Flow through. So there's benefits to un-reg users immediately downstream of the Marshes. There's benefits to un-reg users in the Barwon-Darling and to possibly floodplain communities much like the Condamine-Balonne, not that the Macquarie water goes there, they're going the wrong way but - - -

THE COMMISSIONER: Are there floodplain users lower down after the Marshes before the Barwon?

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MR HALL: Yes, much like this test case.

THE COMMISSIONER: The Lower Balonne.

15 MR HALL: There would be a similar scenario to Phil Townsend.

THE COMMISSIONER: No, I understand.

MR HALL: But also internal stream flows for fish connectivity and supplied communities that as you have heard over the last months, the importance of having a healthy river in that section of the Barwon-Darling. That is quite difficult to measure, the value of that on-flow benefit in conjunction with our production benefits from producing beef from that water.

25 THE COMMISSIONER: I'm proceeding on the basis that something can be of value without being able to measure it in money. Thanks.

MR O'FLAHERTY: I just wanted to ask you a couple of discrete questions about your submission in – to the northern basin – in respect of the Northern Basin Review.

That submission is replicated in the document behind tab 6 of your folder.

MR BUCKNELL: Of our folder?

MR O'FLAHERTY: Yes, sorry, the one that Mr Hall has got, but don't get rid of the one that you've got, Mr Bucknell. I'm going to come to that as well.

MR BUCKNELL: Can I just, back on that, the economic studies - - -

MR O'FLAHERTY: Sure.

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MR BUCKNELL: --- and you might have this fully covered, one of the things that I personally tried to draw to your attention ---

MR O'FLAHERTY: Yes.

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MR BUCKNELL: --- in my submission, was that the – in the irrigation industry this floodplain harvested water that is unlicensed has had an effect on the economic

and social study in the towns that were studied. They didn't break up and say this water is unlicensed water and this water is licensed. This had this economic effect and this didn't. It was all lumped together. So the economic study included unlicensed water and which we suspected is above the cap.

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MR O'FLAHERTY: Yes.

MR BUCKNELL: So the idea that you're going to maintain the social and economic situation - - -

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MR O'FLAHERTY: Is an absence of facts.

MR BUCKNELL: Yes.

15 MR O'FLAHERTY: Again, isn't it.

MR BUCKNELL: Yes.

MR O'FLAHERTY: We don't know – we can't possibly know the impact socially downstream and economically downstream without knowing precisely what is occurring upstream.

MR BUCKNELL: Yes. Yes. And then following on from that if that water is in naturally pre-development days, if that water was in the Marshes and it went under what they use the term very, very falsely as losses, which is – is normal water, environmental water cycle water - - -

MR O'FLAHERTY: The notion that water contributing to the environment is somehow a loss.

30

MR BUCKNELL: Yes.

MR O'FLAHERTY: Yes.

- MR BUCKNELL: Or the evaporation out of the Marshes forming thunderstorms and we have all seen a blue sky morning develop by 1 o'clock in the afternoon to thunderstorms, rain can pass over the head of us because we're close to the Marshes and go east to Coonamble and down the Tooraweenah Road and come through there where they used to have summer crops and the Tooraweenah Road from
- 40 Coonamble was the first country to make \$1000 an acre because it used to have summer crops. Well, that evaporation has not been happening to the same extent and so that economic and social cost or difference has not been taken into account.
- MR O'FLAHERTY: Yes. No, I understand your point there, because it's affecting the evaporation loss is not actually, or the evaporation is not properly a loss because it contributes to the natural water cycle of rainfall upstream.

MR BUCKNELL: And the term loss is something that's - - - .

MR O'FLAHERTY: It's a loaded term, in one sense, isn't it?

MR BUCKNELL: It's a term that's come from the original Department of Water Resources because it is a loss to the system. It is water that has flowed past the pump.

MR O'FLAHERTY: Yes.

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MR BUCKNELL: It's not. It's actually - - -

MR O'FLAHERTY: It's not a loss at all.

15 MR BUCKNELL: No, not a loss at all.

MR O'FLAHERTY: All right. I understand that. Just in terms of the specific questions I had on your Northern Basin Review submission, page 3, there's a discussion under the heading 'Consultation Process'. There's a reference to a report called the 'Hydrological Modelling Report' and I just wanted to make sure I understood I've got the right report in mind. The folder you've got there, Mr Bucknell, should have a report behind tab 4.

MR BUCKNELL: Yes.

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MR O'FLAHERTY: Is that the report that's referred to there in your submission? That's the one.

MR BUCKNELL: Yes. I think so.

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MR O'FLAHERTY: Now, Commissioner, you may recall that this was discussed with Mr Peters and Mr Wise's evidence. This report is dated January 2016 but I understand, am I correct in thinking that it was, in fact, released or published in January 2017?

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- MR BUCKNELL: Yes. This is the report that we were meant to do submissions on and I'm going from memory here, the submissions were meant to close I think the end of January and - -
- 40 MR O'FLAHERTY: Your submission is dated February 2017. The Northern Basin Review reports are October or November. Sorry.

THE COMMISSIONER: The references on page 3 I think are to the 'Hydrological Modelling Report', isn't it?

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MR O'FLAHERTY: Yes, and that's the report I've just taken the witnesses to, which is a report which is on the front cover says January 2016.

THE COMMISSIONER: Yes. I appreciate that.

MR O'FLAHERTY: But – sorry, that's tab 4 of the Northern Basin Review core reports.

THE COMMISSIONER: And what page were we on?

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MR O'FLAHERTY: Just on the front page, essentially.

THE COMMISSIONER: So this is not the report that included the Lower Balonne socio-economic - - -

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- MR O'FLAHERTY: No, this is a hydrological modelling report which is the report that the advisory committee had been requesting throughout their processes but which was never provided whilst the committee was still in existence.
- 15 THE COMMISSIONER: Was there ever any explanation given to you about the lag between it being physically complete and then being made available to people being consulted?
- MR BUCKNELL: No. No. What actually happened is we were trying to do our submissions, and we were waiting for this to come out, and we contacted the - -
 - THE COMMISSIONER: Why I'm asking is I am, I think, easily persuaded by this and other evidence I've heard that the unavailability for a reasonable period of the material about which you were being consulted is a severe, I would have thought, fatal defect in the decency of consultation. But that only excites my interest is, was any explanation given for why it was considered appropriate not to give you this
 - material?

MR HALL: No explanation was given to us and we did ask.

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- THE COMMISSIONER: Have you heard anywhere, anyone advancing a justification?
- MR HALL: We have made our own assumptions, that's all.

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- THE COMMISSIONER: Apart from the cynical and maybe accurate view that some people in government think that by definition all information about its processes should be kept secret, have you heard any other explanation?
- 40 MR BUCKNELL: Not officially, no.
 - THE COMMISSIONER: A hydrologic report doesn't sound commercial in confidence to me, whatever that might mask, in any event. So when you say "not officially" what have you heard around the traps?

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MR BUCKNELL: That we weren't clients of Water New South Wales.

THE COMMISSIONER: This allies with this notion of people being super users, does it?

MR HALL: Exactly.

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MR O'FLAHERTY: And the fact that this report may have been provided to some of those users.

THE COMMISSIONER: We don't know that.

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MR BUCKNELL: I think we possibly do because submissions were already received before this was released so how could those people make submissions without having seen this?

15 MR O'FLAHERTY: Did those submissions refer to this report, did they?

MR BUCKNELL: From my memory yes, on the submissions page, you could go to the, I'm going to say MDBA so whatever the site was and see submissions that had been put in.

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THE COMMISSIONER: I see.

MR O'FLAHERTY: And you referred to documents again under the Freedom of Information that suggested that they may have seen a copy or some detail relating to hydrological modelling.

THE COMMISSIONER: So more than half a year before you.

MR BUCKNELL: Yes.

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THE COMMISSIONER: Right. That seems to be, to put it mildly, a defect in decent consultation too.

- MR BUCKNELL: Yes. And it appeared, we didn't realise this, but when we were going to meetings in Warren with the MDBA we couldn't quite understand the dynamics in the meeting. We would be sitting there trying to lap up information and the other party seemed to be responding to information. And so we didn't know what we didn't know, but they obviously knew something.
- 40 MR O'FLAHERTY: The last question I had in respect of this submission was in relation to the discussion on page 6 of your submission.

THE COMMISSIONER: To us are or to the - - -

45 MR O'FLAHERTY: The Northern Basin Review behind tab 6 of the folder. I wanted just to explore a bit more in the point made in point 3 of those inaccuracies that are identified. And again I'm going to get you to go to one of the reports in that

folder you've got, Mr Bucknell, the report behind tab 3 should be the environmental outcomes of the Northern Basin Review report. And if I could take you to page 60.

MR BUCKNELL: 60?

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MR O'FLAHERTY: 60. And I understand the reference there is that first row – 100 – sorry, wetlands and near channel floodplain, 100 gigalitres, volume over five successive months, June to April, 80 to 85 per cent of the time. When you say it should read over three successive months, is that an error in the report or an error in the underlying – is it a typographical error or is it more substantive than that, is it a more substantive error that you say?

MR HALL: It should not be a typo because I told them about it plenty of times previously but would you like to me explain the impact of that change in three to five months?

MR O'FLAHERTY: I've looked into – personally that is a figure that I've identified in the reports dating back to 2011 in relation to flow indicators which are discussed in what we're calling the ESLT report in 2011. So I wanted to know whether, from what basis do you say it should be three successive months?

MR HALL: Okay. So this for us – us – for the landholder representatives that sit on the Macquarie Environmental Water Advisory Group we're extremely aware of delivering 100 gigalitres over a five-month period in – in relation to the impact of overbank flooding and the delivery of that water over a three-month period. One of the – one of the challenges that environmental water managers face trying to achieve improved environmental outcomes with reduced volume of water is the channel capacity of the stream, and while there are many in-channel environmental benefits, the marshes and their – the people that I represent make a living from, the most benefit is from overbank flows. So the – the – the channel capacity could possibly be no overbank flows when it's – it's – it's delivered at a low flow and – and – and drawn out of the five-month period, whereas if that water is jammed up into a three-month period – –

35 MR O'FLAHERTY: It's more likely to go over bank, because it's the same amount of water - - -

MR HALL: Yes.

40 MR O'FLAHERTY: --- but over a shorter period of time.

MR HALL: That's correct.

MR O'FLAHERTY: Yes. And from where does the figure of three months come from? Is that a - - -

MR HALL: It – it's – three months is a – is a duration that – that is commonly used when planning decisions are made regarding environmental flows, because three months seems to be the – the life cycle of a lot – a lot of the micro-invertebrates that

- - -

5 MR O'FLAHERTY: Right.

MR HALL: That habituate that landscape. So the three months is - is deemed to be the - the correct period.

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MR O'FLAHERTY: When you say it's used in planning, is that three months an accepted figure used by New South Wales Government operators?

MR HALL: Correct.

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MR O'FLAHERTY: And so there's a discrepancy, would you say, between what the operators and the Environmental Department of New South Wales are operating under and what the MDBA have got in their documents?

20 MR HALL: Well, I – I would just put that the other way around.

MR O'FLAHERTY: Sure.

MR HALL: It's the – it's the Office of Environment and Heritage that are the environmental water managers - - -

MR O'FLAHERTY: Yes.

MR HALL: --- that – that accepted that three months is the ---

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MR O'FLAHERTY: Yes.

MR HALL: The correct time period to get the desired outcome from that volume of water.

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MR O'FLAHERTY: Yes.

MR HALL: Whereas it's the – it's the Murray-Darling Basin Authority that's printed this document - - -

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MR O'FLAHERTY: Yes.

MR HALL: --- that's overlooked that fact, even though I've regularly drawn it to their attention.

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MR O'FLAHERTY: I was going to get to that. You no doubt have raised this a number of times with MDBA. Have they explained to you why they use a figure of five months rather than three months?

5 MR HALL: So Mr Glyde did respond to one of my questions about the Macquarie hitting four out of four indicators, the - - -

MR O'FLAHERTY: Yes.

MR HALL: The blue circle that's on the bottom end of that page, and it must be understood by the Commissioner that those two lower volumes, 100 gig and the 250 gig, are the only volumes that are able to be met by environmental – managed environmental releases from the dams in the Macquarie, because once you get over the 400 it's outside the capacity of both the water holdings and delivery restrictions heights that we – we touched on before.

MR O'FLAHERTY: Right.

MR HALL: So we're really only focussed on the – on the two bottom ones.

MR O'FLAHERTY: Sure.

MR HALL: Apparently, I was to find out later on that the MDBA did think when they wrote this document that the – in those bottom two indicators, the 400 and 700, that there was opportunity for environmental water to be tagged on to those size events in an instance possibly to complete a bird breeding, or to provide connectivity. But in reality, that doesn't happen because when the system receives beneficial flows of that volume, the – the water is mostly carried over to the next year to prevent the degradation from low inflows as we're - - -

MR O'FLAHERTY: Sure.

MR HALL: As we're speaking, so we're really only looking at the top two. Mr Blythe responded to my questions on that five month period by saying that the site flow indicator in the Macquarie had been reviewed – sorry, that other site flow indicators in the northern basin had been reviewed and they felt comfortable that the information provided in this document was sufficient to meet the requirements. I was later to find out that the review took place on a site flow indicator many hundreds of river kilometres downstream from that site.

MR O'FLAHERTY: So in respect of a query of a site flow indicator on the Macquarie, in the Macquarie Castlereagh area, the response from Mr Blythe was well, I've reviewed something, another indicator hundreds of kilometres away and that was fine, and so this one should be as well?

MR HALL: I can forward you the email if you like?

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MR O'FLAHERTY: Yes.

THE COMMISSIONER: Perhaps that would be convenient.

5 MR O'FLAHERTY: I take it that wasn't a satisfactory response?

MR HALL: No. No.

THE COMMISSIONER: I notice the time. How much longer have you got?

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MR O'FLAHERTY: That is conveniently all I had to ask in terms of the materials that Mr Hall and Mr Bucknell have provided.

THE COMMISSIONER: Right. Gentlemen, is there – we've read all your materials, but is there something, whether by way of emphasis or addition or supplement to what you've written and said that you want to add for me?

MR HALL: Possibly just highlight the impact of last Sunday's decision by the New South Wales Environment Minister to set a precedent in offering environmental water for sale without any science to justify the decision, and I would like the Commissioner to understand that environmental water management in the Macquarie, my knowledge of it, it's underpinned by very robust science, and our community, the Macquarie Marshes Environmental Landholders are pleased to be part of that process that science is used to underpin the decisions that are made. And including a cross-section of the communities, various stakeholders and the – the decision that the Environment Minister made threatens the whole process, because I'm not aware of any science that underpin that decision, other than the - - -

THE COMMISSIONER: I'm interested in whether there's any business that underlies it, in the sense that is there an unfulfilled demand for irrigation water which can be fulfilled by the expedient of altering the allocation of environmental water away from the environment. Now, I don't know the answer to that but I would have thought that unless you can answer that affirmatively then it's no point.

MR BUCKNELL: I can probably – when we took off yesterday to travel here, the sun was in the west, and we could see reflections of water storages. Now, we weren't close to them but it was obviously reflecting off water. I don't know the depth or anything like that. So there is – there would appear to be actual water in storage, on farm storages to the west of where we took off.

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THE COMMISSIONER: That's what I mean. In order to raid the environmental water with any justification, one would have thought first you would establish that there is an unfulfilled demand, the fulfilment of which will make a difference in dealing with a drought. I don't know the answer to that, but certainly the announcement on Sunday didn't contain any information about it, but I take your

point. First question is, is there enough water available for the trading question?

.ROYAL COMMISSION 29.8.18R1

Interesting drought release that makes water available at a price that will be fixed by a market.

MR O'FLAHERTY: Yes, and most affected will be least assisted.

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THE COMMISSIONER: So the least resilient will be the least able to take up the aid.

MR BUCKNELL: Yes.

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THE COMMISSIONER: Maybe it's reasoning.

MR BUCKNELL: And the previous couple of weeks ago, some of the charges on water were waived by the New South Wales Government and then this water is going to – the proceeds of this water from the environment is actually going to that department. To me, just looking at it, and I hope, presumably I'm not correct, but I hope the environment isn't actually paying for the waiving of those irrigation fees.

THE COMMISSIONER: Yes. Anything else, gentlemen?

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MR HALL: That's it for me. Dugald?

MR BUCKNELL: I'm sure there is. But I - - -

- THE COMMISSIONER: Look, if you experience what the French call "thoughts on the staircase", by all means feel free to be in touch with the staff, if there's something that you want to make clear to us.
- MR BUCKNELL: One thing I haven't the pricing of water worries me tremendously. The people of New South Wales give the water to the irrigation industry at a price set by IPART. Now, what IPART takes into consideration I'm sure isn't everything. It can't be everything, because we haven't got the costs downstream calculated. The then that that water then becomes the property of the irrigation industry which is then sold on a market.

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THE COMMISSIONER: Yes.

MR BUCKNELL: At a sale.

40 THE COMMISSIONER: Yes.

MR BUCKNELL: The point that I – where I live and trade cattle, I buy and sell a lot of steers, and I buy cattle from halfway up Queensland to almost to Adelaide here. And if I go to a market I have to pay the price. I have to be the winning bidder and those steers go to the person who pays the highest price. If the same situation was in my business, the government would supply me those steers at a set price. It

is, to me, when they say water is traded at the market and it goes to the highest value use, that is not correct.

THE COMMISSIONER: That's only after it has been obtained by the vendors.

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MR BUCKNELL: Yes. So - - -

THE COMMISSIONER: Doesn't apply to the obtaining by the vendors.

10 MR BUCKNELL: Yes.

THE COMMISSIONER: At least originally.

MR BUCKNELL: So what that really, to me, says that the State treasury or the
Commonwealth treasury says "We will not collect the appropriate price from you so
it doesn't enter our books." If the reality, the proper accounting procedure was there,
we would have a value received and then the Treasury, through the government,
would say, "We have made the decision that the most appropriate place to spend this
money that we have received from the sale of these goods from the people of New
South Wales is to actually give it back to the irrigation industry." That is where the
best benefit for New South Wales would be. And I, in my mind, I think most people
in New South Wales would say that is much better off spent in hospitals or roads or
schools or one of those other things.

25 THE COMMISSIONER: For the poor rather than the rich, you mean?

MR BUCKNELL: No.

THE COMMISSIONER: Well, do I.

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MR BUCKNELL: More likely, yes, but there are plenty of irrigators – I have to go back to my 80/20 per cent rule before. There are – 80 per cent of the irrigation industry are trying to do the right thing. So 20 per cent, yes, I will, I think they have had tremendous win out of receiving this water and then receiving the ownership of this water where they've managed to get the total benefit of it but with ownership actually comes the responsibility for the costs of it. If you have an asset, you are responsible – if your asset is productive, you're responsible for the profit. But you're also responsible for the costs of it.

40 THE COMMISSIONER: Yes. Thank you. Well, gentlemen, I'm really extremely grateful for your care and thought and for the material, and it has been very instructive for me. Thanks.

MR BUCKNELL: Thank you.

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<THE WITNESSES WITHDREW

[1.08 pm]

THE COMMISSIONER: We will adjourn to a quarter past 2.

MR O'FLAHERTY: Thank you, Commissioner.

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ADJOURNED [1.08 pm]

RESUMED [2.12 pm]

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THE COMMISSIONER: When you're ready if you want to ---

MR BEASLEY: Ms Maywald is here. Today Keane J made orders discontinuing the High Court proceedings brought by the Commonwealth, the MDBA, against Dew in the State of South Australia. I assume that they – the discontinuance was the natural consequence of your withdrawal of the summonses production of documents from the Commonwealth Department of Water and Agriculture and the Basin Authority, and withdrawal of summonses for certain persons to give evidence. That withdrawal, of course, was because the South Australian Government refused to extend the time for you to report beyond 1 February next year, which effectively requires a report to be in final form by 3 December this year because of printing time.

That was despite you informing the Attorney-General in publicly released correspondence (1) the High Court proceedings having been listed for argument in October, meant that you were no longer able to avail procedural fairness to the Murray-Darling Basin Authority and Commonwealth witnesses that you summonsed to appear; (2) that you much preferred to obtain the benefit of the Basin Authority and Commonwealth witnesses being examined, and that in your view this was in the interests of South Australia; and (3) that relevant witnesses who are in the nature of whistleblowers want to give evidence to this Commission but are not willing to do so unless compelled. It is a matter for you what inferences you draw from the failure of the Government to grant that extension. I won't get into what inferences I suggest you should draw today. We will do that in due course.

THE COMMISSIONER: Thank you.

MR BEASLEY: Ms Maywald is here to give evidence.

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THE COMMISSIONER: Thanks.

< KARLENE ANN MAYWALD, SWORN

[2.14 pm]

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< EXAMINATION-IN-CHIEF BY MR BEASLEY

THE COMMISSIONER: Please sit down.

MR BEASLEY: Can you please provide the Commissioner with you current occupation and business address.

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- MS MAYWALD: My current occupation is a Consultant and Managing Director with Maywald Consultants Proprietary Limited. The address is 742 Meechi Road, Langhorne Creek, South Australia, 5255.
- 10 MR BEASLEY: Does that business have anything to do with water?

MS MAYWALD: Yes, it does. I'm a Consultant in the water industry.

MR BEASLEY: All right. Thank you. You've provided the Commission with a signed statement dated 28 August 2018. I believe you have a copy of that with you.

MS MAYWALD: Yes, I do.

MR BEASLEY: And is that statement true and correct?

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MS MAYWALD: Yes, it is.

MR BEASLEY: I tender the statement of Karlene Maywald, M-a-y-w-a-l-d, Karlene is K-a-r-l-e-n-e, dated 28 August 2018.

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THE COMMISSIONER: Thank you.

MR BEASLEY: I just want to ask you some questions about your statement, Ms Maywald, but can I just note to begin with, you were the Minister for the River Murray from 2004 to 2010.

MS MAYWALD: That's correct.

MR BEASLEY: You were a member of the National Party.

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MS MAYWALD: That's correct.

MR BEASLEY: But you were a Minister in the Cabinet of the Rann Government.

40 MS MAYWALD: That's correct.

MR BEASLEY: I could be quite wrong about this, and I do have a very fertile imagination, but I have difficulty imagining, for example, Mr Joyce, when he was Water Minister, being in a Labor minority Government. How did it come about that

45 you as a National member were in the South Australian Labor ministry?

MS MAYWALD: Well, it's an interesting story. The National Party in South Australia is a party in its own right. The National Party at the federal level is made up of a federation of the state parties. The South Australian National Party does not have a Coalition agreement with the Liberal Party. And therefore, I was a member on the crossbench in the Parliament and not in coalition with the Liberal Party, and at the time in 2004 I was asked to join the Labor cabinet specifically to undertake the role of Minister for the River Murray during a period of extreme drought.

MR BEASLEY: Why were you chosen as the Minister for the River Murray? I should preface that: was that a new ministry created in 2004 or had there been a Minister for the River Murray before?

MS MAYWALD: No, I believe that the Minister for the River Murray was created earlier than that, as I recall. It was held by John Hill.

MR BEASLEY: Would that have been under a previous Liberal Government?

MS MAYWALD: No, from my memory, I might be wrong on this, but it was under the Rann Government, and I think John Hill was the Minister for the River Murray when I was asked to join the cabinet.

MR BEASLEY: Right. Right.

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MS MAYWALD: The numbers in the Parliament were close, and there was some unsettling times in the Parliament, and the Government asked if I would join the cabinet. Of course, I replied that I felt that it was – it would be rather difficult for me to do so given that I was a member of the National Party which was in Coalition with the Liberal Party at the federal level and my National Party colleagues were, of course, part of the federated, well, the South Australian National Party by the constitution is involved with the federal National Party. So they – the Labor Party at the time asked me if I would be the Minister for the River Murray, and given that my electorate was the seat of Chaffey, which is the largest irrigation district in South Australia, my involvement in River Murray issues was quite deep at that time. I had been a member of the Select Committee of the River Murray of the Parliament over previous times.

MR BEASLEY: You had been in Parliament for seven years, I see, before this.

MS MAYWALD: That's right, and my credentials were fairly well stamped on the River Murray being one of my key interests in the Parliament. And the Government of the day asked if I would take on that portfolio, and that would be the only portfolio that I would have agreed to, to join the cabinet. Now, the agreement was not between the National Party and the Labor Party. It was between myself and the Premier, and we had a specific agreement that enabled me to operate in the cabinet as a cabinet Minister but with the ability to be able to step aside from cabinet on matters impacting upon my electorate or the business community where it would be likely that we would have different philosophical opinions and that that, I guess, agreement

enabled us to set out very clearly what the dispute resolution process would be and it worked very well during the six years or nearly six years that I was a minister.

MR BEASLEY: Right. All right. In paragraph 5 of your statement you refer to being a member of the Ministerial Council. I assume that's a reference to the Basin.

MS MAYWALD: Yes.

MR BEASLEY: Ministerial Council which was established under the Basin agreement; correct?

MS MAYWALD: That's correct. So I was a member of the Murray Darling Basin Ministerial Council, yes.

MR BEASLEY: And that's – the Council was made up of the respective Water Ministers from each Basin state; correct?

MS MAYWALD: That's correct.

MR BEASLEY: All right. You finished I think as the Minister in March 2010 so your time as Minister ended about seven months before the publication of the Basin – the Guide to the Basin Plan; correct?

MS MAYWALD: Yes, that's correct.

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MR BEASLEY: Had you had much involvement in relation to the preparation of that Plan as the Water Minister or as a member of the Ministerial Council.

MS MAYWALD: The preparation of the Guide to the Plan was undertaken by the Murray-Darling Basin Authority in consultation with the states. So there was some consultation although we were not privy to what the final Guide looked like before it was released, as I recall. There may have been iterations go backwards and forwards between Government agencies for feedback but as far as the Ministerial Council was concerned, the Guide was released by the Murray-Darling Basin Authority in the

knowledge of the Ministers on the Ministerial Council, yes.

MR BEASLEY: I think the Guide came out in either October or November of 2010 by which time you were no longer the Minister.

40 MS MAYWALD: That's right.

MR BEASLEY: Shortly after the Guide came out there was a change of Chairman of the MDBA and Mr Knowles became the Chairman.

45 MS MAYWALD: That's correct.

MR BEASLEY: Mr Knowles invited you onto the Basin Testing Committee.

MS MAYWALD: That's correct.

MR BEASLEY: At that time, as you've said in paragraph 10 of your statement, there had been a fairly negative community – Basin community reaction to the publication of the Guide.

MS MAYWALD: That's correct.

- MR BEASLEY: The Guide also came out there had been in operation I think for quite some time the Federal Government's Restoring the Balance program which involved buybacks of water entitlements. That had proved unpopular as well in Basin communities. Was that your recollection?
- MS MAYWALD: That's my recollection. There was a lot of anxiety regarding government purchase of water and I think that possibly it had something a lot to do with the fact that people were under pressure in regards to their water allocations as a consequence of the drought.
- THE COMMISSIONER: I take it there was division, though, between those who were happy to sell and those who wished others wouldn't.
 - MS MAYWALD: Yes, there was certainly division but there was also a lot of pressure on those who sold as a consequence of their financial position as a result of the drought. So there was a lot of - -

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THE COMMISSIONER: Distressed sellers.

MS MAYWALD: Distressed sellers, yes.

MR BEASLEY: And were both of those factors, one, the Restoring the Balance program and people selling their entitlements to the government from the period I think just after the Water Act commenced, so 2008 to 2010, plus the publication of the Guide, and in combination with the drought that still hadn't quite ended was what was causing the unrest in the community at the time?

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MS MAYWALD: That's correct.

- MR BEASLEY: And Mr Knowles came in to try and, using your words, take a more consultative approach. Should the Commissioner read into that that you had a view that the Guide hadn't been I hesitate the use the word "sold" but hadn't been appropriately discussed with people in Basin communities?
- MS MAYWALD: I think it's my recollection is that the development of the Guide was to be the starting point for the consultation and the the development of the Guide was based on the science that was available at the time, and it was released publicly to be the starting point of that consultation or discussion. It was not the definitive document or a decision-making document. And it was met with great

anxiety. I think it was too much all at once and the community had not been brought along on the journey.

MR BEASLEY: I was going to ask you about that. I mean, I certainly don't want to put words in your mouth and I know I won't be able to but the Guide itself is a fairly – it's a very, very substantial document. Obviously, it has got some headlines in it about how much water needs to be recovered for the environment but all up it's about a 1,500 page document. It doesn't necessarily perhaps on one view seem like the sort of document that starts a conversation. It seems to be this is what it's going to be. Do you think that was a problem with the way it was dealt with at the time?

MS MAYWALD: I think that's the way it was seen in the general public and that's why it met with such strong opposition. However, I do recall that it was meant to be the starting point of the discussion to enable a discussion to be had on the basis of all the known information at the time. My comment before I think I stand by is that it was probably too much all at once - - -

MR BEASLEY: Yes.

- 20 MS MAYWALD: --- for the community to be able to grasp and understand it from the different perspectives of which communities would be coming from. Each community has a different view on water and each community was likely to be impacted differently from their reading of the Guide.
- 25 THE COMMISSIONER: This is a problem, damned if you do, damned if you don't. If you don't release enough information or detail you can be criticised for that.

MS MAYWALD: Absolutely.

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- THE COMMISSIONER: If you do release all of it, as you say, people may feel they have been deluged.
- MS MAYWALD: That's right. And always communities if they don't like what has been presented, then there hasn't been enough consultation or whatever it is so you are damned if you do, and damned if you don't, yes.

THE COMMISSIONER: Probably best always to be damned for too much not than too little.

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- MS MAYWALD: That is always my view, yes, and you can work from there. And the strong negative reaction to the Guide it was probably anticipated that there would be significant community unrest about the process that was being undertaken for the Basin Plan because it was embarking upon the biggest reform in this area that anyone has ever seen in the world on such a wide scale. A Basin-wide scale to look to reset
- has ever seen in the world on such a wide scale. A Basin-wide scale to look to reset the balance had never been done anywhere that we knew of before in the world on that scale. So it was expected that there would be community anxiety about it and

that that would require a very long and detailed consultation process for it to gain approval.

THE COMMISSIONER: Thanks.

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MR BEASLEY: Do you – and please, this isn't a memory test, but the Basin Testing Committee, it was Mr Knowles who personally asked you to be a member of that committee?

10 MS MAYWALD: Yes, he did.

MR BEASLEY: What did he say to you was the reason he was setting that Committee up? I know you say in your statement that it was for the people put on the Committee to give him some advice about how to manage the way the community had been reacting, but do you recall anything broader than that or more specific than that?

MS MAYWALD: Well, I just recall that he called it the Basin Testing Committee for that very purpose. He wanted to test views with people that knew probably more than one person would know individually themselves. So he was – he was keen to test theories and to test the feedback that he was getting from the community in a broader audience of knowledgeable people in the water sector from a broad range of backgrounds.

MR BEASLEY: Again, not a memory test, but do you recall how many meetings there were of the Testing Committee?

MS MAYWALD: I don't recall but I can probably check my notes.

30 MR BEASLEY: More than one though?

MS MAYWALD: Yes, yes.

MR BEASLEY: All right. You say in your statement that:

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The purpose of the Committee was to provide informal advice to Craig regarding information he was hearing during the consultation process.

I assume that means information he was hearing when he had gone out into Basin communities and listened to residents or people with an interest like irrigators or other people of that kind.

MS MAYWALD: Yes.

45 MR BEASLEY:

And a means of testing the theories he was devising by way of response.

What do you mean by the theories he was devising? What does that mean?

MS MAYWALD: Well, the Basin Authority and the responses that they were working towards resolution on the Basin Plan. There was a range of issues that were discussed publicly. There were a range of issues that were discussed and theories that were put forward about how things might be resolved and he sought advice on how we thought things might be accepted in our communities.

MR BEASLEY: I know you're of the view that it's not the best thing to get hung up on a number, but was the main issue of concern that was being dealt with, was it how much water is going to need to be recovered for the environment? Was that the key issue?

MS MAYWALD: That's - - -

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MR BEASLEY: If it wasn't, if it was broader tell us.

MS MAYWALD: Of the Testing Committee you mean?

20 MR BEASLEY: Yes.

MS MAYWALD: No, it was broader than that. Yes.

MR BEASLEY: For example?

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MS MAYWALD: Well, it talked about transitions, it talked about the way in which consultation should occur. It talked about the areas of need to inform the general public about what the environmental water would be used for. It talked about how a reform of this nature needed to be considered in a range of different areas of social and economic as well as the environmental perspectives.

MR BEASLEY: Right. Okay.

MS MAYWALD: That's my recollection.

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MR BEASLEY: Sure.

MS MAYWALD: But I don't - - -

40 MR BEASLEY: The Commissioner has already heard evidence from Peter Cosier from the Wentworth Group who was also invited onto this Testing Committee. Do you recall him being on the Committee?

MS MAYWALD: Yes.

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MR BEASLEY: He gave evidence that either at a preliminary meeting of the Testing Committee or at the first meeting Mr Knowles or the Authority had

commissioned KPMG to, these are my words, take the pulse of the Basin communities and feedback they gave the Testing Committee was that an amount of water to be recovered for the environment that was in the order of 4,000 gigalitres was simply not going to fly in the community. Do you have any recollection of

5 being at a meeting where that advice was given by KPMG or anyone else?

MS MAYWALD: I don't have immediate recollection, but I could check my notes on that.

10 MR BEASLEY: All right. Could you do that for us?

MS MAYWALD: Yes. I can do that.

MR BEASLEY: You obviously made notes when you were at these meetings and ---

MS MAYWALD: I have notes on file, yes. I'm not sure if they directly refer to that, but I can check to see if there's any reference to that.

MR BEASLEY: All right. I would be grateful. You can come back to the staff at any time after you've had a chance to look at those notes. Thanks.

MS MAYWALD: Yes. I can say and add further to that that you didn't need KPMG to tell you that at the time.

THE COMMISSIONER: But if you can spend money on a consultant, why not.

MS MAYWALD: Well, whoever commissioned a consultant, I'm – you know, I don't recall that, but it was certainly at the time there was very, very strong opposition to the Guide to the Basin Plan.

MR BEASLEY: Does that mean your memory is that there was really strong opposition to even the high uncertainty figure of about 3,900 gigalitres being recovered for the environment.

MS MAYWALD: Yes, indeed, that was my understanding from communities in the upstream States, New South Wales and Victoria in particular.

THE COMMISSIONER: Now, the Act under which all of this is being done legislates a fact in subsection 21 (2) paragraph (a) sub-paragraph (i):

The Basin Plan must be prepared having regard to the fact that the use of the Basin water resources has had and is likely to have significant adverse impacts on the conservation of sustainable use of biodiversity.

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And you will from your experience and expertise recognise that there are words there that conjure up some of the international obligations in the treaties that the Act refers to.

5 MS MAYWALD: Yes.

THE COMMISSIONER: It also requires in paragraph (b) of that subsection:

The Basin Plan to promote the sustainable use of the Basin water resources to protect and restore the ecosystems, natural habitats and species that are reliant on the Basin water resources and to conserve biodiversity.

And again there are words being used that come from treaty obligations.

15 MS MAYWALD: Yes.

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THE COMMISSIONER: Is it the case that throughout the whole of your involvement in all of your different roles in this, that you've understood that that is a legislated fact that says, in effect, we have to reduce the amount of water we are using consumptively in the Basin?

MS MAYWALD: Most definitely, yes.

THE COMMISSIONER: And I don't know what your experience as a legislator was, but legislated facts are really quite unusual, aren't they, for Parliament to say this is a fact. Parliament uses facts to say this is what the law should be, but actually to legislate that something is a fact is a very emphatic position, don't you think?

MS MAYWALD: Yes, I would agree with you.

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THE COMMISSIONER: Well, now, the community resistance that as you say you scarcely needed KPMG to tell you about seems to me, possibly at least, to be capable of appearing in this way, that these communities didn't accept that fact, didn't accept that there needed to be material reductions in the amount of water being used

35 consumptively. What do you think about that?

MS MAYWALD: I wouldn't agree with that statement completely. There is – there was a broad understanding in the community that over allocation of the resource was – was occurring, that there was too much water being taken out of the system.

THE COMMISSIONER: Too much by reference to what was then available for what - - -

MS MAYWALD: For consumptive use.

THE COMMISSIONER: --- I will call environmental benefit.

MS MAYWALD: Well, it was more about what was available for consumptive use.

THE COMMISSIONER: Well, that's what I want to - - -

5 MS MAYWALD: Yes.

THE COMMISSIONER: Let me oversimplify the matter by thinking of a water resource as if it were a reservoir. If it's 100 gigalitres, and you give to irrigators entitlements in aggregate to draw 110 gigalitres, that's a classic over-allocation, isn't it?

MS MAYWALD: Well, that's more than a classic over-allocation. The over-allocation is that I would say it was more like 100 gigalitres with, say, 70 being given to irrigators and 30 remaining for the environment which was insufficient for the

15 environment.

THE COMMISSIONER: You anticipate my next point.

MS MAYWALD: Yes.

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THE COMMISSIONER: So over-allocation has as its very concept, because it's not just a reservoir, it's a living, dynamic river system, it has as its very idea that there is an amount that can't be consumed because what we conveniently call the environment needs to have it. Is that a correct - - -

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MS MAYWALD: That's correct, yes.

THE COMMISSIONER: Yes. Well, now, to what extent do you gauge in – reflecting on this – the initial response by some people to the release of the Guide as, in fact, a protest against the idea of any reduction at all in consumptive use?

MS MAYWALD: Well, there's no doubt there may have been some people with that particular view, and it needs to be put in the context that each individual that was protesting was protesting against the potential for their – what they believe to be their rights to be undermined. But the – my personal view is that the argument around what the community was thinking was based on what the impact was going to be on them as individuals, not what was going to be the impact on the environment of doing nothing. The debate should have been, in my view, at the level of governments having over-allocated water and those people having legitimate rights to that water and having established businesses that provided for their families and their communities.

Threatening those rights, of course, had a negative response, and everyone agreed I would think that there had been too much water allocated but nobody wanted to have to give up their own piece of that water. And so that was the difficulty in – in determining and getting community support for a reduction in the amount of water that was taken out of the Basin. Everyone thought someone else should fix it. And

that's understandable if you consider that they believed they had done nothing wrong. They had a legitimate right of a water allocation or entitlement that had been issued to them that they had legally used for many, many, many years, and this major policy change that was happening at the national level was going to have a real impact on them and their families, they believed, and that's why they responded in the way that they did. It was not because they didn't believe that over-allocation had occurred; it was because they were concerned and frightened about what it might mean to them. And the other - - -

THE COMMISSIONER: Particularly if they had no feeling of assurance about what might be called structural adjustment or direct compensation for the massive disruption that might follow.

MS MAYWALD: That's exactly right and - - -

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THE COMMISSIONER: I think you draw to attention that on reflection you, I think, have a very firm view that there was a failure in retrospect, a failure to have paid attention to those matters.

MS MAYWALD: I had a firm view back in those days also that we really needed to pay more attention to those matters because this was the biggest reform that – in a water policy sense, that had ever been embarked upon in Australia and anywhere in the world that we could find. And that if you didn't pay attention to the concurrent regional and community restructure that would be required to support it, you would have difficulty in implementing the reform.

THE COMMISSIONER: Now, in this discussion which we've had with other witnesses as well, the word "community" or "communities" is used, sometimes a bit loosely I think. But almost invariably it strikes me it refers to people living within the Basin, whereas most Australians live outside the Basin.

MS MAYWALD: Yes, that's right.

THE COMMISSIONER: Now, I live outside the Basin, but I just can't remember anything in the nature of consultation with communities outside the Basin concerning the Basin Plan. Do you?

MS MAYWALD: The consultation outside the Basin was mostly with academics, but in South Australia we did have considerable consultation with many different groups. I had established, for example, an Urban Users Water Group during the drought to advise me as Minister in regard to the policies and the – and the programs that we were developing to assist with managing the drought and that included - - -

THE COMMISSIONER: Adelaide was still - - -

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MR BEASLEY: This is water restrictions, is it?

MS MAYWALD: That was water restrictions.

MR BEASLEY: Yes.

5 MS MAYWALD: It was also – we discussed the Basin Plan at those meetings as well.

THE COMMISSIONER: Adelaide was still largely dependent on the Murray then, was it?

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MR BEASLEY: Still is, isn't it?

MS MAYWALD: Yes, still is. Well, the desalination plan has reduced that requirement during drought periods.

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THE COMMISSIONER: Even if in hydrographic terms, hydrological terms, Adelaide might be outside the Basin, in fact, it's an urban population - - -

MS MAYWALD: Dependent on the Basin.

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THE COMMISSIONER: --- utterly dependent on the Basin water resource, whereas the same is not true in hydrological terms of Sydney, for example, or Melbourne, or Brisbane, or Perth.

- MS MAYWALD: That's right. Although at the time there were plans and there was a pipeline built from the Basin to Melbourne which hasn't been used because of various political decisions that have been made, but you're quite correct. Adelaide is the only city that has dependency on the River Murray.
- THE COMMISSIONER: Now, on reflection, would it not have been a better idea to involve the whole of the national community in talking about, as you say, and apparently internationally, globally unprecedented and ambitious expenditure of public funds for national good?
- 35 MS MAYWALD: Certainly there was a lot of involvement from the academic world and from economists and from various others - -

THE COMMISSIONER: I think a lot of academics, but they certainly aren't typical of the community as a whole.

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MS MAYWALD: Possibly, they wouldn't say that.

THE COMMISSIONER: And they only get one vote each, like the rest of us.

45 MS MAYWALD: I guess they would say that their view is important too.

THE COMMISSIONER: It unquestionably is.

MS MAYWALD: And I think it is. Yes.

THE COMMISSIONER: But I mean it serious when I say they only get one vote each like the rest of us.

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MS MAYWALD: Yes

THE COMMISSIONER: This – which is no doubt why people with the expertise and skills of you and Mr Knowles were engaged. This was in the best sense of the word a political exercise, was it not?

MS MAYWALD: Of course, any major policy reform is a political exercise.

THE COMMISSIONER: And when you are trying to facilitate a nationally significant, internationally remarkable endeavour such as the Basin Plan, then I – in the very best sense of the word, it's a genuinely political, in a democracy, that is, it's a genuinely political thing.

MS MAYWALD: Certainly, and I don't think there was any intention to exclude people from the consultation.

THE COMMISSIONER: No, I'm not suggesting there was.

MS MAYWALD: And there was the opportunity for people to participate that chose to.

THE COMMISSIONER: I haven't seen any record of any outreach, as it were, to the big urban populations outside the Basin, in relation to the Basin Plan. It says if this was of concern only to Basin communities, which strikes me as bizarrely wrong.

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MS MAYWALD: Well, I guess that's a view and my view is that the people who were largely impacted by this policy decision and who were going to have to live with it were the people who were living in the Basin.

35 THE COMMISSIONER: Unquestionably.

MS MAYWALD: And I think that's why the concentrated effort was there. There was enormous media coverage all around Australia, so there was no reason why other people couldn't get involved in it. But the outreach into the city, I can only speak from my perspective, and there was outreach into the city in Adelaide.

THE COMMISSIONER: Thanks.

MR BEASLEY: The political aspects of the Basin Plan you have just discussed with the Commissioner, I know one of the things, I certainly read from our discussion and also from your statement, I think one of the things that come across is – comes across is that whilst you have emphasised that the silence was very

important, that it's equally important for everyone to understand that the Basin Plan had to be a political compromise. You've used the words in your statement, for example, in 17 of:

5 *Consideration of competing interests.*

And in 22 of:

Having regard to trade-offs.

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And the different views that different people have, depending where they are in the Basin or what their occupation or beliefs might be, people maintaining that commonsense will prevail as long as you agree with them. Which could be my life motto. But what you really want to get across is that there was no way that – tell me if I'm wrong, but I'm just summarising – there was no way the Basin Plan gets legislated if it's all the environment and all the best available science in relation to the environment. There had to be a political compromise reached to get it through all these Houses of Parliament.

- MS MAYWALD: Most definitely. It required a negotiated outcome. It was not possible to have the science at the time which was the science based on modelling. It's not exact. It's not a matter of fact. Modelling is like I will use, for example, the Bureau of Meteorology. We spend a lot of money as a nation on investment in the Bureau of Meteorology to try and forecast what's going to happen in the future. It's based on modelling. It's an inexact science. They get it right sometimes and
- It's based on modelling. It's an inexact science. They get it right sometimes and they get it wrong sometimes. This is the same with modelling on a Basin-wide scale. The science isn't exact either.
- And you will have noted no doubt in the evidence that you received to date is that many people question some of the science and others say that there is more information that should have been used in the science to underpin the decision-making. There is more information available now than there was 10 years ago to inform those decisions and each time you get more information you're actually able to actually make more informed decisions. But at a point in time you have to make a decision based on the evidence that's available and the practicalities of being able to get it through 11 Houses of Parliament. And so to negotiate an outcome is the only way you can move it forward.
- If you put forward that the science says that in the upper bound and the upper bound is that we want to have an environment that looks like this, we're going to put that forward, you wouldn't have got it through one Parliament. It would have been dead in the water and the reform would not have been able to move forward.
- MR BEASLEY: So 3,900 gigalitres for the environment up to 7,600 gigalitres for the environment results in a failure to legislate a Basin Plan in your view.

MS MAYWALD: Absolutely.

MR BEASLEY: Am I right in the understanding – and please again tell me if I'm not – but I get the impression that you do feel if there was a failure in relation to the approach that has been taken is that there perhaps hasn't been enough transparency or it hasn't been emphasised enough to the public that the Basin Plan had to be a political compromise as distinct from simply being based on the best available scientific knowledge?

MS MAYWALD: I would agree with that. I think that it's ---

10 MR BEASLEY: Please expand on it if you want to, on what I just said.

MS MAYWALD: Thank you. I think it's really important to term it as more of a negotiated outcome across a whole range of competing interests rather than suggesting it was only the politicians that were involved in this by calling it a political outcome. The political outcome is it goes through the parliamentary process but it needs to be a negotiated outcome to enable the politicians to be able to put something before their Parliament that will actually get through. There were strong – there was very strong opposition to the numbers that first came out in the Guide from the Victorian Government, for example.

20 MD DEASLEY, You

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MR BEASLEY: Yes.

MS MAYWALD: New South Wales didn't support those numbers. They're the two – two of the key States in regards to this negotiation. South Australia, of course, had everything to gain and the other two States had everything to lose. And Queensland was a smaller player but also an important player in it. So when you consider the process that's needed to actually nail this kind of significant reform is it has to be a trade-off environment. It has to be work through the issues and what's the best possible deal that you can get or negotiated outcome that you can get and what are the trade-offs that you're willing to accept in that process.

MR BEASLEY: So I don't think it's a mystery or a secret that Victoria and New South Wales wanted a lower figure than a high 2,000 or 3,000 gigalitre recovery for the environment. South Australia obviously was on the record that it wanted at least a 3,200 gigalitre plan - - -

MS MAYWALD: Yes.

MR BEASLEY: --- And we ended up with 2,750 plus maybe 450 minus maybe 40 600 and something and that was the political reality of what was needed to get it through the Parliaments.

MS MAYWALD: That's exactly right. And that's what has resulted and it has gone through the Parliaments and is now what is seen as the Basin Plan. And the Basin Plan, I think, will – we'll look back in years to come and determine whether or not the implementation of the Basin Plan has been successful or not, based on

whether or not we've achieved the environmental outcomes we intended to achieve in the objectives of the Basin Plan.

THE COMMISSIONER: That will require something in the nature of a very complex audit, won't it?

MS MAYWALD: It will require a very complex monitoring, assessment, evaluation and then interpretation of those numbers.

10 THE COMMISSIONER: But ultimately a report card.

MS MAYWALD: Yes.

THE COMMISSIONER: Published to say have we succeeded or not.

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MS MAYWALD: And it won't happen next year or the year after or the year after because you don't undo 100 years of damage in one or two years or 10 years. The benefit of environmental water will only be seen sometime down the track and it's very hard to forecast when that will be although - - -

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MR BEASLEY: You're assuming it doesn't all go to irrigators.

MS MAYWALD: I'm assuming that the environmental water will be used for environmental purposes. Yes.

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MR BEASLEY: Yes. It's a good assumption to make.

THE COMMISSIONER: When I say "audit", sorry, I don't mean in terms of an end of period final assessment. I think I mean, like, financial audits for ongoing

businesses, they're progress reports, they tell you how you're going so far and they may provide information therefore for what you should do in the future.

MS MAYWALD: That's right.

35 THE COMMISSIONER: But they aren't the end of the story. They're a snapshot at a particular time.

MS MAYWALD: Yes. That's exactly right.

- THE COMMISSIONER: It seems to me that with progress towards what the Act calls protecting and restoring the biodiversity, you can only ever have these progress reports and you wouldn't actually say "I have failed." You might however say "I have not yet succeeded".
- 45 MS MAYWALD: That's correct, yes.

THE COMMISSIONER: One of the reasons why you can't say "I have failed" is no one has, I think, proposed that environmental watering will within, say, two years achieve such and such. That may be an aim but that's not the way in which you define success, surely.

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MS MAYWALD: It's – I mean that – when – let me start again.

THE COMMISSIONER: For a start we don't know what the future, short-term or long-term, holds in terms of weather patterns.

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MS MAYWALD: No, we don't. And we know from the Millennium Drought that we can't necessarily rely on past data to inform future modelling.

THE COMMISSIONER: Yes, if you could grow crops with long-term average flows it would be a very different world, wouldn't it?

MS MAYWALD: Well, if you look at the dryland farmers that don't use irrigation who have prayed for rain every year after putting an enormous amount of money in the ground, they gamble with that every year, so they understand that variability.

- What we have seen in the Murray-Darling Basin, however, is that a period over the last 50 years where we've had higher inflows on long-term average than we had on the first 50 years of the last 100 years. And the dependency and the growth in allocation of those waters has been based on the flows of the most recent 50 years.
- But even if you overlaid the first 50 years on top of what the development we've received we're in trouble. And so I think that the the understanding that there was a problem that needed to be fixed was well and truly there. The understanding that we needed to identify some objectives that we could aim towards to improve the situation was important. And that we also acknowledge that it was really important to have the appropriate monitoring, assessment and evaluation tools at play to actually assess how we were going on on delivering on those objectives from the environment's perspective.
- THE COMMISSIONER: Well now, I don't mean this mischievously, but isn't it therefore a pity that the National Water Commission has been abolished, given what it did?
 - MS MAYWALD: I would agree and I the National Water Commission, I think, was an important part of what enabled our significant progress in Australia on water reform more broadly than the Murray-Darling Basin but across the nation over the last decade and a bit. The National Water Initiative was an extremely progressive and very effectual, sorry, very effective tool to drive national water reform policy.
- THE COMMISSIONER: Well, it was another of these globally remarkable governmental initiatives, isn't it?

MS MAYWALD: Yes, it was.

MR BEASLEY: Were you appointed Chair of the Water Commission just prior to or just after the Basin Plan was – the Basin Plan was November 2012 which is the same year you were made Chair - - -

5 MS MAYWALD: Just before, I think.

MR BEASLEY: Just before.

MS MAYWALD: Just before, I think. Yes.

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THE COMMISSIONER: What do you understand to have been the rationale for abolishing the NWC? Put to one side for the moment expense.

MS MAYWALD: From what I understand it was a recommendation from the Department of Environment to the review of Federal Government committees and boards.

THE COMMISSIONER: So it was expense, was it?

- MS MAYWALD: I'm not sure that it was expense or whether or not the government agency had other drivers for it, I don't know. You would have to ask the other agency.
- MR BEASLEY: Can I read from Hansard. Senator Fifield. This is tab C of the bundle. The reason it was driven was that due to:

The substantial progress already made in water reform and the current fiscal environment - - -

30 THE COMMISSIONER: Yes. It was expense.

MR BEASLEY:

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--- there is no longer adequate justification for a standalone agency to monitor Australia's progress on water reform.

THE COMMISSIONER: I remember that the problems of counter-terrorism had been sufficiently dealt with by me in my first, I think, 18 months of office when I was the statutory monitor that they proposed to abolish me on the same basis but they changed their mind.

MR BEASLEY: I've got a feeling there was another reason but anyway - - -

THE COMMISSIONER: No, they didn't go ahead with it. So it sounds as if, alas, it's part of obtaining an efficiency dividend, as they call it. A horrible phrase, it means cutting expenditure.

MS MAYWALD: At the time, I know in the first round the National Water Commission was not put up as a potential savings. The second - - -

THE COMMISSIONER: Well, it couldn't possibly have cost enough money to have even been noticeable next to the budget of most other departments, surely? I mean, you weren't thousands strong, were you?

MS MAYWALD: It was a very small organisation and it was very disappointing to all who had an interest in the National Water Commission that it was to be abolished, yes.

THE COMMISSIONER: So how will the monitoring evaluation reporting function, as you understand it, be carried out at the junctures in the future that you've told me before you think is necessary? Who will do that?

MS MAYWALD: Well, I - - -

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THE COMMISSIONER: We know the Productivity Commission has a certain role but what else?

MS MAYWALD: We know that the Murray-Darling Basin Authority has a certain role to accredit the Basin Plans.

THE COMMISSIONER: I'm talking about checking their work. I don't mean – I assume we're all sufficiently mature politically not to be talking about them checking their own work.

MR BEASLEY: I don't know about that, but anyway.

- THE COMMISSIONER: Well, that is a really serious matter. I have not heard anything anywhere published on behalf of the Authority suggesting they regard themselves as self-auditors. That would be insulting to the rest of us.
- MS MAYWALD: Forgive me, I may have misled there. What I meant was that the Murray-Darling Basin Authority has a role in accrediting the State's plans.

THE COMMISSIONER: They absolutely do. Absolutely do.

MS MAYWALD: And so the States have the major role in the implementation and the rollout of the Plan and the Murray-Darling - - -

THE COMMISSIONER: But they're not talking about the audit of that.

MR BEASLEY: Your Commission was doing report cards on the progress from, for example, New South Wales, Water Sharing Plans progressing on to Water Resource Plans under the Basin agreement – sorry, under the Basin Plan, correct.

MS MAYWALD: Yes, the Commission was required to – to assess the implementation of the Basin Plan.

THE COMMISSIONER: Who does that now?

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MS MAYWALD: The Productivity Commission has a role to do that and as I've said in my - - -

MR BEASLEY: Your concern is the Productivity Commission reports to Treasury and not to COAG, is that - - -

MS MAYWALD: As I said in my statement, I have concerns that the Productivity Commission is not necessarily the appropriate authority to undertake that work, given that the Productivity Commission reports to the Federal Treasury and not to COAG. The advantage of the National Water Commission is it had the buy-in of the states. The states were required to support appointment of Commissioners and were a party to COAG and the agreement of the National Water Initiative and were a party of the establishment of the National Water Commission and therefore they had buy-in to the reports of the Commission.

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THE COMMISSIONER: So that remains a - I'm very interested in what you've written in paragraphs 23 and 30. That really remains, in your view, what I call a design feature that could valuably be revisited. We – you think we are lacking something by not having something of the kind that the NWC brought to the exercise.

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MS MAYWALD: Yes, I do. I believe that a reporting function to COAG is imperative when you have a significant policy reform agenda on the national scale that involves state implementation.

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THE COMMISSIONER: And a lot of money.

MS MAYWALD: And a lot of money, yes. So it was my view that the Productivity Commission was not necessarily the right place for that function to be held or to be undertaken. The National Water Commission was 10 years old. The National Water Initiative was 10 years old. There had been significant progress towards that reform agenda but there was various areas of the National Water Initiative that remained underdone, in my view. And rather than abolishment of the National Water Commission I would have preferred to see National Water Initiative phase 3, and potentially a rethink of the National Water Commission and what its objectives should be.

The National Water Commission was administered through the Department of Environment, and I had a view that the environmental components of the reform agenda were best managed through the environment department, but there was also a reform agenda that was necessary in the urban water sector, in the agriculture sector and the reform of a – that – or the impact of the reform on the agricultural sector in

the Basin would have been better managed in an economic portfolio rather than the environment portfolio.

THE COMMISSIONER: And by the way, COAG is a good forum for reform to be both devised, implemented and reviewed, isn't it?

MS MAYWALD: COAG - - -

THE COMMISSIONER: In many ways that really is what COAG does.

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MS MAYWALD: That's exactly what COAG is.

THE COMMISSIONER: It's not a jamboree; it's not a tea party exercise. I mean, they meet together because what they can bring as governments for a national purpose.

MS MAYWALD: Yes, that's exactly right. It's about how you reconcile the interests of the nation from the – through the leaders of the nation and I think the COAG model is an extremely good model.

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THE COMMISSIONER: And significantly, as I think you've drawn to attention, it operates a mixture of party affiliation of the governments that comprise it.

MS MAYWALD: It certainly does, and it changes very regularly. So it's – it has to stand the test of time across political cycles and that's why COAG works so well. I do a lot of work in the international area of water sector and water reform, and as Chair of the International Centre of Excellence for Water Resources Management we do work funded by DFAT through their sustainable investment portfolio on capacity building for governments in developing countries and - - -

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THE COMMISSIONER: This is the monsoonal belt of countries, is it?

MS MAYWALD: Yes. Yes. And the question that we're often asked is how did Australia achieve its significant reform and Australia is looked at to be world leading in this regard because no one else has been able to achieve the kind of interjurisdictional or transboundary decision-making that we've been able to achieve in the Basin Plan. And I often point to the fact that COAG was the lead – was the – the COAG process enabled - - -

40 THE COMMISSIONER: Yes.

MS MAYWALD: --- the reform to occur. And if you go back to the very first time that there was significant change in the water sector was back in 1994, through the micro-economic reforms of national competition policy agreed at the COAG level by all of the States and the Commonwealth. And that was the national agenda for water reform, I think it was called, something like that. But that was the – that 10

years from 1994 to 2004 was significant in Australia's history of the water reform journey.

THE COMMISSIONER: No, I agree.

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MS MAYWALD: As was the National Water Initiative, which was also agreed by COAG in the 10 years of the National Water Commission. It would have been my view, rather than abolishing the Commission, it would have been a more appropriate time to take to actually take stock of where we're up to and look at what the next 10 years needed to look like.

THE COMMISSIONER: Thank you. Two things that I'm interested in in this regard. Notoriously, since the 1880s or even earlier, the then colonies and later states who were concerned with the Basin often disagreed, indeed the history tends to suggest usually disagreed about the allocation and stewardship of the water resource. What do you, with your I think must be unique experience, combination of experiences, what do you think is the method by which nowadays when we've got the Water Act from referred powers with referred powers, got the Basin Plan, when parties disagree, let's pick two that have historically disagreed a lot with each, New South Wales and Victoria – out of delicacy I will leave South Australia out of it. So just imagine New South Wales and Victoria disagree about something important.

MR BEASLEY: The capital of Australia.

THE COMMISSIONER: What do you think should be the method by which in this water area, let me assume New South Wales and Victoria disagree about something critical to the operation of the Basin Plan, how should that be determined, do you think? So I should – I've made an assumption there. Should it be determined, or should it just be left to the historically exclusive method which is just politics?

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MS MAYWALD: Well, I can't see how another method would be sustainable or agreed to. The political process is about trade-offs, it's about democracy, it's about bringing to the table the different views and then negotiating a way forward. And the

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THE COMMISSIONER: In the constitution, there's a clue of what might have been, but isn't, I stress, by the particular responsibilities that don't include this, of the interstate commission, which in any event was never much more than a piece of vapour. So that back in the 1890s they did think in terms that there would be disagreements between states, including actually the reasonable use of rivers for, among other things, irrigation, and that in ways that never became practically significant, the interstate commission operating in a hybrid fashion, partly as experts and partly as a court, quasi court, would determine those things. So wistfully, as a constitutional lawyer, I can look back on that and think, "Gee, I wonder with a bit of tweaking could that work", but I don't intend to waste much time on that as a Royal Commissioner, because the history of interstate commission is the history of nothing of any substance, I regret to say.

So once upon a time our political ancestors thought about something like this. They came up with something vaguely approaching it. I'm wondering whether you've thought of any other way apart from two governments abusing each other in the papers and perhaps being a bit more polite to each other in private, what else could be done? Which – I have to say, I don't mean that disrespectfully. I mean, it seems to me, if you go back to the 19th century, George Reid, for example, a Premier of New South Wales, specialised of abusing people in public and being marginally more polite in private, but it was very unuseful and didn't achieve much in the way of compromise. Do you have a reflection on that?

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MS MAYWALD: Well, as a constitutional lawyer, sir, you would know that it took a long time to negotiate the constitution, and it's because people were negotiating it. And unfortunately - - -

15 THE COMMISSIONER: All men, as it happened.

MS MAYWALD: All men. But the notion that if you were to find another methodology that didn't include politicians, but it would still have to include people, and unfortunately - - -

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THE COMMISSIONER: Voters. Yes.

MS MAYWALD: And unfortunately no matter what model you put up, there will always still be differing views out there in the community and there will always be significant lobbying as to who should be on that particular decision-making body, whether it's appointed or whether it's elected. If it's elected then it will be elected by where the majority of votes are which is not necessarily where the Basin interests lie. And there's – there is no, I think, shining model out there that you could pick up and put into - - -

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THE COMMISSIONER: No. Particularly in federation you end up in a Parliament

MS MAYWALD: Particularly where you have people with competing interests for a resource, or competing interests for anything, you will always have people who will want to lobby hard for their position and for the benefit of their family, their business, their community. So at the time of negotiation of the Basin Plan and the Water Act in the first instance and the ceding of powers, it was put to each of the states that we should look to convert the Murray-Darling Basin Commission to a Federal Government agency, because if the Federal Government had control of it, they would look after it in the national interest. My view on that was, well, you would just be handing it from one group of politicians to another group of politicians where the weight of numbers is still in New South Wales, Queensland and Victoria, whichever way you looked at it. So you wouldn't actually be resolving the problem, just lifting it to another level.

THE COMMISSIONER: That's why I raised the sort of thwarted imagination in relation to the interstate Commission, because plainly people had similar thoughts all those years ago and thought of something that vaguely looked like a court, vaguely looked like a panel of experts. The interstate commission did historically do some interesting work, but nothing to write home about, particularly in relation to water.

MS MAYWALD: Well, it's why COAG is so important and why I lament - - -

THE COMMISSIONER: It's not an adjudicative body. It doesn't actually decide things in a binding fashion.

MS MAYWALD: No, it's not. But when you get agreement there, it's binding.

THE COMMISSIONER: Yes. Quite.

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MS MAYWALD: And each of the states go back to their jurisdictions and legislate those agreements, generally speaking.

THE COMMISSIONER: So I gather that you would agree, if I were to observe in my report that COAG should not be seen merely as historically significant for the history of this reform, but as in a continuing way critical to its best success.

MS MAYWALD: That would be my view, yes. And my view is based on the fact that at that level you have a discussion that – that focuses the attention on the national interest first and foremost and a forum whereby there can be the normal argy-bargy out there publicly but at the end of the day they generally come to a reasonable negotiated decision on the agreements that they establish and that those – historically the results of COAG agreements have stood the nation in good stead.

THE COMMISSIONER: Don't tell me things that you shouldn't reveal, but COAG, of course, involves all Australian Governments, whereas Basin states, including the ACT, of course, leaves out the Northern Territory, Western Australia and Tasmania. Is there any embarrassment or difficulty or problem in your view about those non-Basin states being involved in, with full rights at COAG in relation to the Basin?

MS MAYWALD: Well, I would look at the issues that we're talking about here on the national scale in water reform generally, not just in the Basin.

THE COMMISSIONER: Yes.

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MS MAYWALD: And that it's important that all water reform across all the states be overseen by – by an agreement to progress those reforms nationally, and that's what the National Water Initiative was about. It wasn't just about the Basin Plan. And the National Water Commission had a function to oversee, monitor, assess and report on.

THE COMMISSIONER: Well, the N stands for national. Yes.

MS MAYWALD: Yes. The national implementation, each of the states' and the territories' compliance with the National Water Initiative. The – it was given an additional task to – to audit or to report on the states' progress and implementation of the basin plan.

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THE COMMISSIONER: Of the plan.

MS MAYWALD: Through this. That was an additional function given to the National Water Commission by the Commonwealth Government.

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THE COMMISSIONER: Okay. Now, the second question that's excited by some earlier things you've written and said looks at the dark side. What, in your opinion, follows if one of the Basin states carries out a threat to withdraw, whatever you understand that to mean, from the Basin Plan? What would follow from that?

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MS MAYWALD: It's a question I can't answer without getting advice.

THE COMMISSIONER: That's one of the reasons why I have asked it, hoping that you might have an answer.

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MS MAYWALD: Yes.

MR BEASLEY: Do your best. Go on.

25 THE COMMISSIONER: Have you – I'm sure you've thought about that with various hats on in the past.

MS MAYWALD: I have thought about the reasons why a Basin state would choose not to do that in preference to doing that. If – they may threaten to do so, but generally speaking there's a lot riding on the Basin Plan for each of the states, and each of the states have certain drivers in their own decision-making around this. And those are – can be fiscal. There's a lot of money attached to the implementation of the Basin Plan. There's a lot of problems that are caused within states in regards to decisions on water allocation in the past that states alone can't fix by themselves.

- Upstream and downstream of the Menindee Lakes is a good example. And to have the Basin Plan there to help to guide those decisions and to also support the funding of the reform that's necessary keeps them at the table.
- THE COMMISSIONER: I have no difficulty in assembling reasons why we should have something like this, and you might sum them all up by saying because we're Australians.

MS MAYWALD: I think I was referring more to the fact that there are more reasons for States to stay engaged than not engaged.

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THE COMMISSIONER: I do understand. I do understand that's what you are saying. But just looking on the dark side, if a threat to withdraw actually was carried through and there was a withdrawal, what in your view would follow from that?

5 MS MAYWALD: I can't answer that question. I – without advice. I would need to take some advice legally to find out what the implications would be.

MR BEASLEY: Well, depending on which State it was, I mean they've got to prepare Water Resource Plans which all have their own Sustainable Diversion Limit which has to add up to the Basin-wide Average Sustainable Diversion Limit so you have an immediate problem with the Basin Plan Sustainable Diversion Limit if those Water Resource Plans weren't abided by.

THE COMMISSIONER: Yes. Yes, I mean, things I may have to report on is exploring – perhaps a better word would be speculating – about the viability of the Water Act itself in the event of a so-called withdrawal by a state. I presume by withdrawal they also involve revoking the referral of power.

MR BEASLEY: The constitutional viability of the Water Act?

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THE COMMISSIONER: No, just the viability - - -

MR BEASLEY: Of the Plan or the Act?

25 THE COMMISSIONER: --- which may encompass constitutional matters.

MR BEASLEY: Yes.

MS MAYWALD: The nature of the referral of powers and the Water Act and the interactions with the NWI and the Basin Plan and the establishment of the - - -

THE COMMISSIONER: And the external affairs power.

MS MAYWALD: And the external affairs power and the Murray-Darling Basin Authority. I mean, it's a much more complex question than I can possibly answer.

THE COMMISSIONER: It certainly is.

MS MAYWALD: And I think our saving grace in this space is it's just as complex for each of the states to consider these matters and most often I think the view has been that it's a bit like unscrambling an egg to try and get out of it. And whilst there might be some posturing about withdrawal it would be very difficult to do so and to – to then put in place other measures to manage water resources in isolation of cooperation with the other states would be particularly difficult as well, because the historic nature of the Murray-Darling Basin has been a process of collective agreement and the Murray-Darling Basin Commission, whilst it took a long time

sometimes to get decisions, when decisions were made they stuck and that was because it was in everyone's interests for that to occur.

And I think the same applies to this particular reform. Whilst there is some posturing and there is some concerns around various elements such as compliance and I guess that's what triggered the establishment of this Royal Commission in the first instance was concerns regarding the ability of, or the compliance of states and their ability to be able to implement the Plan in full. I think those are the issues that are most concerning to the general public and particularly in South Australia, how can we have faith in the Basin Plan if we can't have faith in the states to carry out the compliance within their own laws.

And, you know, the issues that have been raised on Four Corners reports and through the media regarding the allegations of water theft undermines that confidence in the ability of the states to be able to implement the Basin Plan in full and on time. And that I think has been the – the reason why the Basin Plan has come back so sharply into focus again, is the concern about whether or not there can be enforcement of compliance to it and I think that's the issue that concerns me most.

- 20 THE COMMISSIONER: Well now, there's compliance by I will call them individual businesses. The most obvious failure there being what's properly called water stealing, but there's compliance by other players, including official entities and ultimately there's compliance, I think as your last answer suggested, by states with the intergovernmental agreements and with the Water Act that comes from them.
- Have you did you have you ever had occasion to wonder and have you ever reflected on whether the that high level issue of compliance by the states with the intergovernmental agreement obligations and particularly those that have been legislated in the Water Act, how that could be enforced in a court?
- 30 MS MAYWALD: No.

THE COMMISSIONER: At all?

MS MAYWALD: Given that - - -

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THE COMMISSIONER: We're talking about High Court proceedings.

MS MAYWALD: Yes, I understand.

40 THE COMMISSIONER: I think.

MS MAYWALD: I have not really given any thought to that. My understanding and – of the history of the way in which these agreements in the water sector, in the Murray-Darling Basin in particular has been carried out is through that agreement and reporting progress against those agreements rather than through courts of law. I understand that there have been times in the past that this has been talked about.

THE COMMISSIONER: It has been talked about, yes.

MS MAYWALD: But it has always been through a protracted negotiated outcome that has avoided that in the past.

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THE COMMISSIONER: Don't get me wrong. I'm not suggesting for a moment that a court is a good place for this to end up in. But all laws are ultimately only as good as the capacity ultimately – this is a very positivist view – only as good as the capacity of the court to enforce them.

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MS MAYWALD: Well, the entitlement system that we have in Australia is far preferable to the entitlement system that they have in the United States for water, for example, where - - -

15 THE COMMISSIONER: What's the contrast that you draw there?

MS MAYWALD: The contrast there is that in the states it is through the courts. Every decision on transfers and all those sorts of things happens through the courts and it does not work. Well, it does work - - -

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THE COMMISSIONER: Well, there have been the - - -

MS MAYWALD: It does work but - - -

THE COMMISSIONER: It's almost the equivalent of treaties between States from the 19th century, I think.

MS MAYWALD: Yes, and so the – in my view it's preferable to have the mechanisms that we have in place in Australia which has allowed us and enabled us to have a significant water reform agenda that has been delivered largely, and we're, you know, we're two-thirds or more of the way through the implementation of the Basin Plan and we have hit a rocky patch but it still doesn't mean that we're not going to deliver on the Plan by 2019. The questions will always be out there, is it enough or does there need to be more. In my view, there will always be a need for water reform and there will always be a need for revisiting and there will always be a need to recalibrate the decisions that have been made in the past, and that's only good policy to continue to do that.

THE COMMISSIONER: While I'm picking your brains on that - - -

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MR BEASLEY: It's not just the states that have to comply with the law.

THE COMMISSIONER: No.

45 MR BEASLEY: The Murray-Darling Basin Authority has to comply with the law as well.

THE COMMISSIONER: And there's another entity as well called the Commonwealth.

MS MAYWALD: Yes.

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MR BEASLEY: I only say that for my own benefit, to remind me.

THE COMMISSIONER: I'm interested to know your thoughts on how the Plan could – what does it mean to say that the Plan should take account of climate change in light of what the statute calls the best available science? What are your thoughts on that?

MS MAYWALD: Well, there are – there's two ways you can look at that. Climate change is a bit like forecasting the weather. It's problematic, you get it right sometimes, you don't get it right other times. There's also the science actually gives you a wide range of scenarios that could play out and you could take an approach to manage that to say let's base all of our decisions on the worst case scenario going forward and then see how it tracks but you would do then is you would actually lose the opportunity for exploiting the resource within its capability because you would – you would be actually assuming the worst case scenario all the time. Or you could look at the best case scenario and overexploit your resource because you know it's going to end up somewhere in the middle. So my view has always - - -

THE COMMISSIONER: Well, you may hope that it's going to end up somewhere in the middle.

MS MAYWALD: Well, we could end up - yes, we will end up somewhere between those two points.

THE COMMISSIONER: The whole point of that best and worst is that each might happen.

MS MAYWALD: Yes. Each might happen and some variation in between may happen also. So adaptability in the processes which you put in place to manage that uncertainty is critically important. And in, for example, South Australia where we have water allocation plans as they do in the other jurisdictions. We call them water allocation plans here. And those water allocation plans have an assessment of the available resource at any given point in time when it is reviewed and decisions are made about the allocation of water at that point in time. Those plans are 10 years in the making and during that 10 year period – of 10 years in duration and in that period of time, over that 10 year period, we manage the available resource and the variability through seasonal allocations.

So the entitlements will sit there. The seasonal allocations will go up and down. In South Australia the decision has been made to allocate only high security water so most often it will be 100 per cent allocation. In other jurisdictions they have different rules around general security and others. In that 10 year period if, for

example, the entitlements were only ever allocated on average about 80 per cent a review would be undertaken at that 10 year period to say, well, are our entitlements set at the right level. Should we revisit those entitlements because it's not – looking backwards it doesn't appear like we're going to be able to give them to you 100 per cent of the time so there can't be that high security any more.

THE COMMISSIONER: That treats the ideal as being 100 per cent enjoyment from time to time of your entitlement.

10 MS MAYWALD: Yes. That's right.

THE COMMISSIONER: And I'm not surprised. That's a premise of what you've just said.

- MS MAYWALD: Well, the premise of it is that the high security licences in South Australia generally as a rule of thumb have been considered to be available 95 per cent of the time.
- THE COMMISSIONER: And I take it that is thought to have important social and economic implications including planning certainty for enterprises.

MS MAYWALD: Investment certainty.

THE COMMISSIONER: And economic worth for lending.

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MS MAYWALD: Investment certainty is critical in these areas. If you've got rules changing all the time and you've got the goal posts moving it's very difficult to ascertain a sound basis for investment.

- THE COMMISSIONER: I take it you could have all of that benefit plus also what I will call another segment of the market which is for riskier water.
 - MS MAYWALD: Yes, which is what they do in other states. Yes. In other states they do have opportunistic water so to speak, that if there is a lot of water around they're able to take more water. Now, that has its problems downstream also and the the ability to take more of that opportunistic water has contributed to the over-
 - allocation of water in the system as the ability to build dams on farms and divert more water during - -
- 40 THE COMMISSIONER: Floodplain harvesting as it's sometimes called.

MS MAYWALD: Well, it's floodplain harvesting but it's also turkey's nest - - -

THE COMMISSIONER:

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MS MAYWALD: Turkey's nest dams and pumping into those dams when there's more water around for later use, it's not just floodplain harvesting, it's the ability to be able to store more on farm through other means as well.

MR BEASLEY: Can I just – this isn't a question necessarily for the witness although the witness is free to comment. It's just an observation based on what you raised, Commissioner, at the beginning of your discussion with the witness concerning section 21 of the Water Act and the legislative fact of over-allocation. If you look at the document, the report card behind tab 3 - - -

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THE COMMISSIONER: Yes.

MR BEASLEY: --- which was the National Water Commission National Watering Plan report card 2013 that Ms Maywald – it was published when Ms Maywald was the Chair.

THE COMMISSIONER: Yes.

MR BEASLEY: You will see in relation to each of the valleys findings are made on, as an example page 18, the third criteria for the report card is, does the Plan – this is New South Wales we're talking about Water Sharing Plans – does the Plan address overuse and is there a pathway to sustainable extraction. That question is repeated throughout the entirety of this mercifully brief 540 page report in relation to each valley. So it seems to be the whole report card is premised on an understanding that there's an over-allocation in relation to each valley.

THE COMMISSIONER: Yes.

MS MAYWALD: And the National Water Initiative itself is a document that acknowledges over-allocation in the Murray-Darling Basin as the premise for the – a number of the principles of the National Water Initiative. So it's certainly a broadly accepted political fact, if you would call it that, that over-allocation is - - -

THE COMMISSIONER: Social perception.

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MS MAYWALD: Yes.

MR BEASLEY: They were all the questions I had for you based on your statement. Is there anything you would like to add to pass on to the Commissioner that we either didn't cover, you would like to expand on or something new to raise?

MS MAYWALD: I would just like to actually emphasise the complexity of transboundary negotiations on water and the difficulty in - - -

45 THE COMMISSIONER: I've just got an inkling of that. Yes.

MS MAYWALD: And the – and the fact that the inherent complexity of the issues requires that there be a long and deep consultation process with those affected by the policy outcomes of the decisions.

5 THE COMMISSIONER: It makes the consultation really challenging both to devise and to carry out, I would have thought.

MS MAYWALD: Yes, most definitely. And there are many people in the Basin who are experts on the Basin through expertly picking through the different reports to find the bit that suits their particular argument. And there are no doubt many experts that have written reports - - -

MR BEASLEY: Are these lawyers or scientists?

15 MS MAYWALD: They're both.

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THE COMMISSIONER: I've never heard of cherry-picking lawyers, no.

MS MAYWALD: And so from a political perspective it's extremely difficult - - -

THE COMMISSIONER: Yes.

MS MAYWALD: --- to actually get information that says it's black and it's white. Because it's not. There are just so many shades of grey in between that need to be considered when you're actually trying to find a way to progress a reform agenda in an environment as complex as this. The Murray-Darling Basin Plan is not perfect. But it is certainly a lot better than what we had before the Plan was in place. And it was certainly a lot more than we could have absolutely anticipated we would achieve if it hadn't been for the Millennium Drought. The Millennium Drought gave us a snapshot into the future of what a climate-affected environment might look like. And so if we didn't act at that time and actually force through some of those decisions that need to be made, we would have not had the opportunity and we would have been in the position that many other countries are in now.

35 The work that I'm doing in India, for example, and the work that I'm doing in China where they're just trying to embark upon a Basin-wide scale of planning is – it demonstrates and shows to me what it would have been like if we had not got this Basin planning process in place when we got it in place. So I will emphasise again that it's not perfect, but it's certainly a heck of a step forward than where we were, a very large step change in the way we think about water in this nation and it's not the 40 end of the journey. It's part of the process, and there will be no doubt many times that we will look back and – and reflect upon how the opportunity that was presented, because of the Millennium Drought to actually take that step change in reform was predicated by the National Reform Agenda in 1994 and the National Water Initiative in 2004 that was agreed by all of the states through the COAG 45 process, enabled us when the drought hit to take some affirmative action because there had been an enormous amount of work undertaken.

THE COMMISSIONER: Now, the Plan in that sense was inspired by circumstances that had culminated in the Millennium Drought. There was circumstances before the drought?

5 MS MAYWALD: Yes.

THE COMMISSIONER: Which, as you say, made very fertile ground. But you attribute the mind-concentrating quality of the Millennium Drought as a major reason for the success in making – in reaching the Water Act and the Plan; is that right?

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MS MAYWALD: I do, yes.

THE COMMISSIONER: Does it not follow from that that the Plan is something that ought to be adhered to when – not if – when we come across other droughts.

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MS MAYWALD: Absolutely. Yes. As should the Water Allocation Plans, and the Water Allocation Plans are a key component in helping us deliver and manage and adapt to that uncertainty that occurs.

THE COMMISSIONER: Well, they're the Plan on the ground, aren't they?

MS MAYWALD: They are.

THE COMMISSIONER: In the location.

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MS MAYWALD: That's exactly right. And the other thing I – you know, whilst there was a drought in terms of water availability, it was the investment at the national level that has allowed this to occur. If there wasn't \$10 billion on the table, the states wouldn't have come to the table to actually drive the reform agenda in the way in which it has played out. The money was a significant factor in it also.

THE COMMISSIONER: Well, the fact that a lot of that is Commonwealth money is one of the reasons why, I must say it seems to me, in terms of political science and social justice that, of course, every government in Australia should play an active role in about it all, because it's Australian money; it's not Basin states money.

MS MAYWALD: Yes. And there has been Australian money invested in the Murray-Darling Basin Commission, prior to the Murray-Darling Basin Authority, over many, many decades. It's seen as a national interest issue because the Basin is the largest water resource Basin in Australia. It contributes greatly to the GDP, and it is a significant player in our agriculture production. So it has a bigger – a bigger impact on the nation than it does on – well, it has a collective impact on the nation from the states' participation in the decision-making. I think it's - - -

45 THE COMMISSIONER: That's one of the reasons why I was interested in consultation or not with people outside the Basin, because it's obviously a matter that is of literally national significance.

MS MAYWALD: Well, I certainly know that there are a lot of people who are very interested in the Basin who live outside the Basin, yes. There's no doubt about that, and, you know, with the benefit of hindsight, would it have changed what the outcome was if we had more people from Sydney and Melbourne and Brisbane engaged in the negotiations? They were all highly stressed by water restrictions at the time too. So there was, you know, the focus on water at the time was much, much bigger than the Basin Plan and - - -

THE COMMISSIONER: And stewarding water.

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MS MAYWALD: Yes.

THE COMMISSIONER: Need to steward water.

MS MAYWALD: That's right. And I think the focus of the national Government, the Coalition Government at the time that started this process, was largely driven by the water shortages and the fact that it was – had become not just a local newspaper item in the Wagga Wagga Times, or whatever it's called. It was actually on the front page of every newspaper around the nation, because water restrictions were hitting

hard. And so the opportunity for the Federal Government to actually get the social – what's the word for it?

THE COMMISSIONER: Licence.

25 MS MAYWALD: Well, I don't like using that word. It's – no.

THE COMMISSIONER: Nor do I. I thought that was the expression you were reaching for.

30 MS MAYWALD: It's more about a social acceptance of a large investment in one part of Australia would not have occurred unless everybody was feeling the pain of a water-scarce environment.

THE COMMISSIONER: Yes. Quite.

35

MR BEASLEY: Thank you very much.

THE COMMISSIONER: I'm very, very grateful for your assistance.

40 MS MAYWALD: Thank you, sir.

THE COMMISSIONER: If I may say so, it's a perspective that I'm sure no other individual could bring. So I'm very, very much obliged to you.

45 MS MAYWALD: Thank you, sir. Thank you so much.

THE COMMISSIONER: We will adjourn until 10 o'clock here tomorrow.

MR BEASLEY: I will adjourn until Tuesday.

THE COMMISSIONER: We will see you when we see you.

5 MS MAYWALD: Thank you very much. It's very interesting.

THE COMMISSIONER: Thank you.

10 **<THE WITNESS WITHDREW**

[3.36 pm]

MATTER ADJOURNED at 3.36 pm UNTIL THURSDAY, 30 AUGUST 2018

Index of Witness Events

GARY ROBERT BEVAN HALL, SWORN	P-2412
DUGALD WILLIAM WENTWORTH BUCKNELL, SWORN	P-2412
THE WITNESSES WITHDREW	P-2485
KARLENE ANN MAYWALD, SWORN	P-2486
EXAMINATION-IN-CHIEF BY MR BEASLEY	P-2486
THE WITNESS WITHDREW	P-2521

Index of Exhibits and MFIs