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SENATE

STANDING COMMITTEE ON RURAL AND REGIONAL AFFAIRS
AND TRANSPORT

Reference: Management of the Murray-Darling Basin system

THURSDAY, 18 SEPTEMBER 2008

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**SENATE STANDING COMMITTEE ON
RURAL AND REGIONAL AFFAIRS AND TRANSPORT**

Thursday, 18 September 2008

Members: Senator Sterle (*Chair*), Senator Milne (*Deputy Chair*), Senators Heffernan, Hurley, Hutchins, McGauran, Nash and O'Brien

Substitute members: Senator Farrell for Senator O'Brien, Senator Siewert for Senator Milne

Participating members: Senators Abetz, Adams, Arbib, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Bob Brown, Carol Brown, Bushby, Cameron, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Eggleston, Ellison, Farrell, Feeney, Fielding, Fierravanti-Wells, Fifield, Fisher, Forshaw, Furner, Hanson-Young, Humphries, Johnston, Joyce, Kroger, Ludlam, Lundy, Ian Macdonald, McEwen, McLucas, Marshall, Mason, Minchin, Moore, Parry, Payne, Polley, Pratt, Ronaldson, Ryan, Scullion, Siewert, Stephens, Troeth, Trood, Williams, Wortley and Xenophon

Senators in attendance: Senators Adams, Birmingham, Farrell, Fisher, Hanson-Young, Heffernan, Hutchins, Siewert, Sterle, Wortley and Xenophon

Terms of reference for the inquiry:

To inquire into and report on:

1. Water management in the Coorong and Lower Lakes for inquiry and report by 30 September 2008, with particular reference to:
 - a. the volume of water which could be provided into the Murray-Darling system to replenish the Lower Lakes and Coorong;
 - b. options for sourcing and delivering this water, including:
 - i. possible incentive and compensation schemes for current water holders who participate in a once-off voluntary contribution of water to this national emergency,
 - ii. alternative options for the acquisition of sufficient water,
 - iii. likely transmission losses and the most efficient and effective strategies to manage the delivery of this water,
 - iv. Commonwealth powers to obtain and deliver water and possible legislative or regulative impediments, and
 - v. assessment of the potential contribution of bringing forward irrigation infrastructure spending under the Council of Australian Governments agreement to deliver water to save the Coorong and Lower Lakes;
 - c. the impact of any water buybacks on rural and regional communities and Adelaide including compensation and structural adjustment; and
 - d. any other related matters.
2. The implications for the long-term sustainable management of the Murray Darling Basin system for inquiry and report by 4 December 2008, with particular reference to:
 - a. the adequacy of current whole-of-basin governance arrangements under the Intergovernmental Agreement;
 - b. the adequacy of current arrangements in relation to the implementation of the Basin Plan and water sharing arrangements;
 - c. long-term prospects for the management of Ramsar wetlands including the supply of adequate environmental flows;
 - d. the risks to the basin posed by unregulated water interception activities and water theft;
 - e. the ability of the Commonwealth to bind state and territory governments to meet their obligations under the National Water Initiative;
 - f. the adequacy of existing state and territory water and natural resource management legislation and enforcement arrangements; and
 - g. the impacts of climate change on the likely future availability of water.

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Committee met at 4.35 pm

CHAIR (Senator Sterle)—I declare open this public hearing of the Senate Standing Committee on Rural and Regional Affairs and Transport. The committee is hearing evidence on the committee's inquiry into water management in the Coorong and Lower Lakes. I welcome you all here today. This is a public hearing and a *Hansard* transcript of the proceedings is being made.

Before the committee starts taking evidence, I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee.

The committee prefers all evidence to be given in public but, under the Senate's resolutions, witnesses have the right to request to be heard in private session. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. If a witness objects to answering a question, the witness should state the ground upon which the objection is taken and the committee will determine whether it will insist on an answer, having regard to the ground which is claimed. If the committee determines to insist on an answer, a witness may request that the answer be given in camera. Such a request may of course also be made at any other time.

Finally, on behalf of the committee, I would like to thank all those who have made submissions and sent representatives here today for their full cooperation in this inquiry.

[4.36 pm]

ABRAHAMS, Mr Harry, Acting Assistant Secretary, Water Reform Division, Department of the Environment, Water, Heritage and the Arts

FLANIGAN, Mr Mark, Assistant Secretary, Strategic Approvals and Legislation Branch, Approvals and Wildlife Division, Department of the Environment, Water, Heritage and the Arts

HARWOOD, Ms Mary Beatrice, First Assistant Secretary, Water Efficiency Division, Department of the Environment, Water, Heritage and the Arts

SLATYER, Mr Tony, First Assistant Secretary, Water Reform Division, Department of the Environment, Water, Heritage and the Arts

CHAIR—Welcome. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude questions asking for explanations of policies or factual questions about when and how policies were adopted. Officers of the department are also reminded that any claim that it would be contrary to the public interest to answer a question must be made by a minister and should be accompanied by a statement setting out the basis for the claim.

The department has lodged a submission, which we have numbered 1, with the committee. Do you wish to make any amendments or alterations to that submission.

Mr Slatyer—Thank you. We did make the submission available quite early in the committee's life and as a result some of the factual information in the submission has changed. We would be happy to lodge a very short update of that. Basically, it just affects the lake levels, the allocations and the water availability numbers that were in that submission. The changes are a result of local rain events, other local run-off and allocation decisions made by the states earlier this week. We can update some of that information. Unless you would like me to provide you with the update right here we can provide you a very short written update.

CHAIR—Due to the constraints of time, if it is very brief I will give you the opportunity; otherwise you can table it. In fact, I will go one step further: I invite you to make a very brief opening statement and if you wish to include that updated information in your brief opening statement, you may. We can kill two birds with one stone.

Mr Slatyer—The submission indicated the levels of the two lakes. The submission said that the level at Lake Albert was -0.18; it is now -0.16, so it has gone up a little.

Senator FISHER—Can you refer us to where this is in the submission?

Mr Slatyer—My apologies. These are facts in attachment A to our initial submission—the third dot point under the first point. I will start again. Lake Albert was at -0.18; it is now at -0.16. Lake Alexandria was at -0.27; it is now at -0.25. In the section on the southern basin water balance, which is on page 5 of our submission, the amounts of water from various sources are listed under the heading ‘Commitment’. The irrigation carryover commitment is now 773; the irrigation allocation commitment is now 528; so the total volume committed is now 4,356. On the left-hand side of that table the total volume now in storage is 4,294. Underneath the table there is an annotation that it ‘includes allocations made by New South Wales’. That should now read it ‘includes allocations made by New South Wales, Victoria and South Australia effective from 15 September 2008’. Finally, in section 6 of the document on page 7 there are updates on the allocation figures but I expect it might take more time than you wish to spend for me to change all those but I am happy to do so if you like. Would you like me to run through those changes?

CHAIR—If you can do it in about a minute, go for it.

Mr Slatyer—The New South Wales Murray allocation should be 50 per cent and the gegalitres column is 90. The New South Wales Murrumbidgee allocation column should be 75 per cent and the gegalitres 259. The New South Wales Darling allocation is the same at 100 per cent and the gegalitres column should be eight gegalitres.

CHAIR—Eight?

Mr Slatyer—Yes, it is a correction. For the Victorian Murray the high reliability line allocation is four per cent and the water column is 36 gegalitres. The Victorian Goulburn allocation is six per cent—this is high reliability water—and the water column is 72 gegalitres. The South Australian Murray allocation is 11 per cent and the water column is 63 gegalitres, with a note that this is effective from 1 October. It was announced on 15 September but does not take effect until 1 October. The total water therefore is 528 gegalitres. That completes the corrections.

Senator FISHER—These are all updated figures. Is the change from 11 gegalitres to eight gegalitres for New South Wales Darling an update or was there an error in the original figure? You have not changed the allocation but you said there was a correction in the water column, if I recall correctly.

Mr Slatyer—I am not sure that ‘error’ is the right word. It is probably due to a better estimate of the water consequences of—

Senator HEFFERNAN—This is the latest guess.

Mr Slatyer—This is the very latest estimate. The department has issued and tabled a second submission earlier today which we are happy to speak to. During evidence that came before this committee from a range of sources there was a lot of interest in the issue of critical human needs and also the issue of how the South Australian water share is calculated. I am very happy to spend a couple of minutes giving an explanation of both those matters if that would be helpful to the committee.

CHAIR—I would rather go straight to questions. If that is one of the questions then we can address it then. Thank you for that opening statement; perhaps you could table it. Senators, time will be allocated on a fair basis to those on the committee—full-time members first. If there are interjections from other senators I will be calling the Senator who has the call.

Senator FARRELL—Thank you, Mr Slater, for your two submissions. Can you tell us how the government's program for purchasing water for the environment is progressing and the ways in which the government is accelerating this program?

Ms Harwood—I can take that one, Senator. The first round of—

Senator HEFFERNAN—You have got the prepared answer; he has got the prepared question.

Ms Harwood—The first round of purchasing has completed and we have done a review of that purchase round. In terms of where settlement has occurred and the water has been transferred to the Commonwealth environmental water holder, the current water achieved through that is approximately 28 megalitres of water.

Senator HEFFERNAN—Entitlement or allocation?

Ms Harwood—That is entitlement.

Senator HEFFERNAN—So that is no real water.

CHAIR—Senator Heffernan, I have gone through some serious discussions lately from your colleagues about you jumping in and taking their time.

Senator HEFFERNAN—We need to know what we are talking about—because I do not think they know.

CHAIR—Sorry, Ms Harwood.

Ms Harwood—I would like to update you on the allocation but the figures have just come through for the revised allocations for South Australia, Victoria and New South Wales and I would like to take those into account so I would like to come back to you on notice on that figure of the actual allocations against those entitlements. We have also commenced this week—

Senator FARRELL—You are talking 28 gicalitres—

Senator HEFFERNAN—The 28 gicalitres that you are talking about, is it allocation or entitlement?

Senator FARRELL—Mr Chairman, I thought I had the call.

CHAIR—You do have the call.

Senator HEFFERNAN—That is a meaningless answer. Surely to God if the committee wants to be informed we have to know the answer.

CHAIR—Senator Farrell has the call.

Senator FARRELL—Can you please explain about the 28 gigalitres?

Ms Harwood—It is the entitlements. This is a program of acquiring water for the long term for the environment. Against those entitlements allocations will be made each year just as for any irrigator, and that water will be used for environmental purposes. So it is the water entitlement that we have purchased and the total is 28 gigalitres. We have also commenced a purchase round in the northern basin, that is, a call for people to offer us their water for sale. That was advertised on Tuesday this week and that will be open for some time.

Senator SIEWERT—How much are you allocating to that purchase?

Ms Harwood—We have not put a ceiling on it either in dollar or gigalitre terms. We are going to be purchasing water—

Senator HEFFERNAN—Mr Chairman, with great respect: if there are 28 gigalitres of entitlement how much of that is actually allocation—how much out of the entitlement is actually real allocation that goes to those entitlements for this year? In other words, what water are you putting back into the system?

Ms Harwood—That is the question that I said I would like to come back to you on. I have an estimate here but it is pre the most recent allocations.

Senator HEFFERNAN—What was it pre? Your 28 gigalitres will be pre too.

Ms Harwood—It was approximately three gigalitres against the previous month's allocations. There have now been further allocations in the basin states.

Senator HEFFERNAN—So we are talking three or four gigalitres—which is no water. You need 700 gigalitres.

Senator FARRELL—Can you explain some of the difficulties in bringing forward irrigation infrastructure investments in order to accelerate the returns of water efficiency savings to the environment?

Ms Harwood—I could take that, Senator. The projects that we agreed to in July and the scale of the projects agreed to at COAG and the investment in bilateral projects with the states are very large projects and they need careful and extensive preparation. The design work in doing those and the work in doing due diligence on the large-scale infrastructure projects is considerable. If you want the best outcome in terms of works and developments that are fit for purpose and that really meet the terms of taking those irrigation communities to a long-term sustainable frame, then you need to take the time to design the projects properly and to do the due diligence on them to ensure value for money. I think that all parties are working as fast as they can on the various projects around the basin and that process is underway.

Senator HEFFERNAN—So our job is actually to find out if there is enough water in the system to do something about the lakes. That is allegedly the task of this committee.

CHAIR—Sorry, Senator Heffernan—Senator Farrell, have you finished your question?

Senator FARRELL—I have just one last question. As you would be aware, there have been some calls for an interim basin plan to be developed over the coming months so that it can be in place by the basin states prior to the basin plan scheduled for development by 2011. What might be some of the practical ramifications of developing such a plan and of its implementation by the basin states in advance of the basin plan scheduled for development in 2011?

Mr Slatyer—The reason that the current agreed arrangement is for the basin plan to take effect in 2011 is due to the comprehensive nature of that plan as required by the Water Act that it will encompass sustainable diversions limits for every catchment in the basin. It will encompass water quality objectives and a range of other fundamental requirements for effectively managing water in the basin. All those requirements are spelled out in section 22 of the Water Act.

The act also requires that there be a period of consultation with all affected stakeholders. It requires a range of procedures in terms of state ministers having opportunities to comment on the draft. I have to say that one of the great challenges faced by the authority here is that a lot of the basic information collection and the understandings about the potential impact of different options and different approaches that will be taken—for example, in setting the sustainable diversions limits—have yet to be undertaken. Under the act the new Murray-Darling Basin Authority is required to take account of a range of factors in setting these limits. That reflects the fundamental importance of these limits in setting a new balance between the environment and consumptive uses, and the consultation and other provisions reflect the fact that the authority to get that right is going to have to be very well informed and engage in a very thorough process. So we and the states have agreed that the appropriate time frame in which to develop that plan is two years, or until 2011, and we as a department will be providing all the assistance we can. But it is the authority's responsibility to do that job.

Senator SIEWERT—Last time you were here I asked you about the IGA and you said that next time we met you would be able to tell me about progress in negotiations. So this is 'next time'. I would like to know what progress has been made in the last two weeks.

Mr Slatyer—The short answer is that lots of progress has been made. The officials' level processes have been completed. The legislative package, the next step, is now with all governments to review and arrange for passage through their parliaments. So from an official's point of view I am pleased to say that the work is done and it is now up to the parliamentary process to unfold in various jurisdictions.

Senator SIEWERT—How soon do we expect that the packages will be tabled in each state parliament? I am aware that the South Australians have already committed.

Mr Slatyer—Our understanding is, at least at officials' level, that we are being assured that all governments are aiming to have this package through by 1 November, which was the date that governments initially signed onto.

Senator SIEWERT—Including the Commonwealth?

Mr Slatyer—That is the objective that we set, but our own legislation process is dependent on the success of the state legislation processes.

Senator SIEWERT—So at this stage you are proposing to wait until the other states have passed their legislation before the Commonwealth will table—

Mr Slatyer—No, it does not quite work that way. There is a sequencing of legislation that needs to be followed, but the Commonwealth's legislation can be introduced when the Commonwealth is ready, which will be relatively early on. But the final execution of that legislation cannot occur until the states have gone through their business.

Senator SIEWERT—I am aware of that. I am also aware that there have been precedents in the past when the Commonwealth has passed legislation and that then comes into effect subject to the states passing theirs. Will the Commonwealth have their legislation in the Commonwealth parliament by 1 November?

Mr Slatyer—It is not really for me to answer that because ultimately the handling of legislation in the parliament is a matter for the minister not the department. At an officials' level we have done all we can do to allow governments to get on and do what they need to do.

Senator SIEWERT—Okay, in respect of the comment that you made about having everything in and meeting the date of 1 November, can you tell the committee that we are going to meet that date if you cannot tell me whether the legislation that you are going to be introducing by then—

Mr Slatyer—All I said, Senator, was that it continued to be our objective.

Senator HEFFERNAN—The terms of reference for this part of this committee's work is what is in the system for the lakes—right, do we all know that? Who informs the department on the answer to that?

Mr Slatyer—We are informed primarily by the MDBC due to the importance—

Senator HEFFERNAN—Okay, that will do.

Mr Slatyer—but we also take information from the state governments.

Senator HEFFERNAN—So to the best of the knowledge of the department given these lakes we are wanting to save—which is fair enough because there is a whole lot of human activity around them—were originally salt lakes and the sea is half a metre from the top of the barrage, when were they last naturally salt lakes?

Mr Slatyer—I do not think that we know the answer to that question. It was a long time ago that they were completely salt lakes.

Senator HEFFERNAN—The give-and-take of tides—

Mr Slatyer—There is evidence that there has been mixing of seawater near the Murray mouth—

Senator HEFFERNAN—Which is the nearest to that? How long ago?

Mr Slatyer—Since just before the barrages were installed, as I recall.

Senator HEFFERNAN—That's right—70 years ago. So if you are informed by the Murray-Darling Basin Commission, the simple answer that we want and they want to know, which is 700 megs, is this: is there water in the system or not? That is all we want to know and, if the answer is no, tell us.

Mr Slatyer—The audit of water—

Senator HEFFERNAN—Can I say that when the priority of the government is buying entitlement in a situation where you are looking for allocation and you do not even know how much of the entitlement is going to convert to allocation—you are going to come back with that—I would have thought you would know the answer to that before you went to the entitlement, or as you went to the entitlement.

Mr Slatyer—The audit and our previous submission indicated the amounts of water physically in the system, but of course—

Senator HEFFERNAN—But what is the answer? Just give it to me in a snapshot.

Mr Slatyer—We have stated the facts about the water that is in the system.

Senator HEFFERNAN—Well, is the water there or not? Can I get to that.

Mr Slatyer—There is a difference between the water that is in the system and the water that is required to provide that amount—

Senator HEFFERNAN—Available in the system. Is it there or not?

Mr Slatyer—I am not going to give a categorical answer because—

Senator HEFFERNAN—You are supposed to be auditing the bloody river. Is the water in the system or not available? There is no need to duckshove. We need a plain answer.

Mr Slatyer—The thing is you ask whether water is available, then I have to ask, 'Available for what purpose?' before I can answer the question.

Senator HEFFERNAN—Of the water that is in the system that is not allocated to human resources, that is high-priority water that has already got a contract on it. Of the water that is not contracted now in the system, is there enough water available to do the job that we are talking about?

CHAIR—Sorry to interrupt, but just before Mr Slatyer answers that can I ask that the document you were reading from earlier on is tabled so some of the committee members can have a look at it before you go.

Senator HEFFERNAN—This is what you call bureaucracy at work here. We just want a simple answer. At the present time, to the best of your knowledge, yes or no: outside the already contracted water, is there water in the system to do the job?

Mr Slatyer—If you are talking about the water that governments can readily access and is not precommitted, then the answer is clearly no.

Senator HEFFERNAN—Right, where getting somewhere.

Mr Slatyer—And we made that clear in our earlier submission.

Senator HEFFERNAN—We just want to get simple, short language.

Mr Slatyer—But the way you put the question initially, Senator, was much broader than that. It was impossible to answer.

Senator HEFFERNAN—All right. I have an impossible way. If the Murray-Darling Basin informs the department—and this is about fixing the system this year, which is the task of this committee's hearing now—and the government has a priority to spend money to rescue the system at the present time if the water is available, and if that Toorale sale up the top there which is allegedly all about the longer term plan is an informed decision, then what part did your department play in the purchase of the property? In a short answer. Did you go and have a look?

Ms Harwood—Me personally?

Senator HEFFERNAN—No, did the department go and have a look?

Ms Harwood—The Commonwealth contributed basically—

Senator HEFFERNAN—No, the question is: did the department drive onto the property and have a look? We will come to the flyover. I know the answer to all this: you did not.

Ms Harwood—There has been extensive work surveying both the flora and fauna at Toorale. New South Wales National Parks—

Senator HEFFERNAN—Did the department drive onto the thing and have a look? You are the people that make the decisions. The answer is no.

Ms Harwood—The New South Wales Department of Environment and Conservation—

Senator HEFFERNAN—Two people went there for 45 minutes to look at the plant that was given in with the sale. And they were from the Parks mob in New South Wales. Other than that, who drove onto the property before the sale?

Ms Harwood—There has been extensive work at Toorale by the New South Wales National Parks and Wildlife Service—

Senator HEFFERNAN—You mean aerial?

Ms Harwood—No, on the ground, assessing flora and fauna—

Senator HEFFERNAN—Let me tell you the answer. According to the people who live and work on the place—and you can deny this if you want to—according to the manager and the people who are there, two women who represent the National Parks mob, the New South Wales mob, drove on there for 45 minutes to have a look at the plant and equipment that was given in with the sale, because the stock were not. Other than that, who has been on the property?

Ms Harwood—In the immediate days before the purchase of Toorale, New South Wales Parks has had people there. Through time on the property, not in the immediate days before, there has been extensive work on the property assessing the conservation values of the property, looking at the flora and fauna and the ecosystems there. It had already been identified as a high priority, of high value in nature conservation terms. That is—

Senator HEFFERNAN—I am talking in terms of the water task of the Commonwealth government. Forget about the national park value of the place; this originally was about water. Sure, there has been some sort of a deal done—

Ms Harwood—It is actually originally—

Senator HEFFERNAN—and an exchange of moneys between the state and Commonwealth. What work did your department do, by inspecting the place, about water, not about what bushes grow and what is under the bushes?

Senator FISHER—Prior to the sale.

Senator HEFFERNAN—Yes, prior to the sale.

Ms Harwood—The purchase of Toorale is about both its nature conservation values and its water entitlements.

Senator HEFFERNAN—I understand that. What work did the department do on your task, which is the water?

Ms Harwood—The water entitlements are clearly specified and we had access to a clear description of those as currently allocated under the New South Wales legislation. And valuations of those—

Senator HEFFERNAN—If you are informed on that, tell the committee what licences you have bought.

Ms Harwood—I can provide those on notice. There is a detailed list of licences associated with the property.

Senator HEFFERNAN—But you would agree with Don Blackmore, Tom Hatton and Mike Young that it is not going to return any water of any means to the system?

Ms Harwood—No, I would not.

Senator HEFFERNAN—Where would you disagree?

Ms Harwood—I would say that the property has considerable water entitlements—

Senator HEFFERNAN—I am not talking about entitlements; I am talking about allocation.

Ms Harwood—When water flows in the Warrego and the Darling that water which was previously harvested—pumped from the river for irrigation—can now be used for environmental purposes.

Senator HEFFERNAN—Righto, we will go to that. There is an 8,000 meg licence on the Darling, which is an extraction licence which is dependent on the level of the river at Louth. It is a low security licence. I documented all this in the Senate for you the other day if you want to have a look at it for your information.

CHAIR—You have three minutes, Senator Heffernan, before we go back to Senator Siewert.

Senator HEFFERNAN—There is a 6,000 meg gravitational set up out of the Warrego. That is all the water you are talking about. There are two bank licences and believe it or not there is an area licence—they were done away with years ago. There is a 1,600 hectare area licence. This purchase will return no water to the system. What I am asking is this: if the department is informed by the Murray-Darling Basin Commission and they have not even been asked to comment and have not been there, and you blokes have not been there but two girls from the national parks have been there, what sort of a ramshackle arrangement is it? It is a viable dry land property.

Senator FISHER—I have two lines of questioning, hopefully one is just one question so I will ask that first. I note your reference in the supplementary submission on page 1 to possible incentive and compensation schemes for water holders. In formulating that further advice to the government, has the department taken into consideration the views of the likes of the South Australian irrigators, loosely, suggesting for example that the federal government double the amount being offered per megalitre from some \$2,300 to some \$4,800 as a mechanism of providing incentive?

Mr Slatyer—The specific answer to your specific question is no. We did not interpret this term of reference in that way and our submission has endeavoured to respond to the term of reference as we saw it. We saw it as being about tax incentives and also about the role of the government's water acquisition program.

Senator FISHER—In that case, can I suggest to you that I see this term of reference as including the aspect that you have referred to but also including the price that you might choose to offer irrigators to provide them with the incentive to relinquish their entitlement to water. I ask the department to revise on notice their advice in respect of that term of reference to encompass

that possibility. Secondly, your initial submission refers on several occasions to the term ‘critical human needs’. Can you provide the committee with a definition of that term and a definition of the term that has been signed off by the minister?

Mr Slatyer—Miss Harwood will very quickly deal with the first question because we may not have to take it on notice if she can deal with it quickly. I will address the critical human needs question.

Ms Harwood—I am happy to provide more comment later if you need it but I guess the thing to look at is that under the water purchase program, which is intended to deliver a long-term restoration of the balance—basically taking water from irrigation by purchasing it from willing sellers and making it available for environmental use—value for money is a major consideration.

Senator FISHER—Sorry, Miss Harwood, we do not have much time. Do you have a definition of the term ‘critical human needs’?

Ms Harwood—I am sorry; I was answering your first question. The point is just that if you pay a lot more than market price for water now you will be able to buy less water overall.

CHAIR—We are going to invite you back for another two hours tomorrow. I just have to consult with some colleagues. We will extend tomorrow’s hearing. So, Senator Fisher, I am sure you can come back to your critical human needs question tomorrow.

Senator SIEWERT—If we can guarantee that we are having them back tomorrow we are happy to have a go tomorrow.

CHAIR—I will extend and change flights and do everything that we need to do to give the committee ample opportunity to ask questions of the department tomorrow.

Senator HANSON-YOUNG—In your first submission you refer numerous times to flooding the lakes with salt water as a viable option. Since then we have obviously heard from a number of witnesses and received a number of submissions that say that the salt water option perhaps is not as viable as others believe. One of the big concerns is in relation to the effect on ground water and that is not something that your submission dealt with. Could you give me an understanding of what the department has looked into in terms of the effect that increasing the salt intake in the lakes would have on the ground water of the Fleurieu region?

Mr Slatyer—What was said in our submission was that that course of action of allowing some seawater into the lakes may result in a viable estuarine system in Lake Alexandria depending on the volumes and release patterns of the flows. I want to be clear that we did not assert that it would produce necessarily a viable outcome. Our view and our expectation are that before anything like that occurred there would be a normal environmental impact assessment of the action. Indeed, the Environment Protection Biodiversity Conservation Act allows for that kind of process. Issues of the kind you and others have raised about the possible environmental risks of allowing that to occur would be fully explored in that context.

Senator HANSON-YOUNG—My understanding, based on reading the submission, is that that is a responsibility that should be left to the South Australian state government. Is that your opinion?

Mr Slatyer—In the normal course of events South Australia would be the proponent of the action and that would trigger the action. My colleague Mr Flanigan can explain how that all works if you wish.

Senator HANSON-YOUNG—Do you have any idea as to whether that is what they are considering doing? Or have they started? Have you had any communication around that?

Mr Slatyer—It is not for us to speak for South Australia.

Senator HANSON-YOUNG—All I want to know is whether you have had any communication and dealings with the South Australian environment department in relation to looking at a risk assessment or an environmental impact study as to what the effects of flooding the lakes with salt water would be?

Mr Flanigan—I will answer that part of the question. At this stage we have been having informal discussions with South Australian officials around what the requirements would be should it be necessary to open the barrages, and the requirements for the EPBC Act. As we understand it, they have already commenced the process of exploring the modelling and the like for around the lake that would be associated with that piece of work. So we fully expect that, if it is required or desired that the barrages be opened, they will go through an assessment process and that assessment process will involve a consideration of all the relevant and potential impacts.

CHAIR—I have had a request from Senator Adams to ask a 30-second question. Can we please indulge her, because Senator Adams will not be here tomorrow.

Senator ADAMS—I have done a tour of the area. I am from Western Australia but I have been up and down and am used to the salinity side of things. Could you tell me how much salt actually is deposited in the Lower Lakes every day?

Mr Slatyer—No. I cannot answer that question.

Senator ADAMS—Could you take it on notice? I want to try to get a really good idea about just how much salt is coming down the river.

Mr Slatyer—The salt would have two sources. There would be salt embodied in the River Murray that is coming into the lakes—

Senator ADAMS—That is what I am talking about.

Mr Slatyer—and there is salt load created through evaporation of the current lake body. If we can track down those figures, we will provide them.

Senator ADAMS—The reason I am asking is that, with the decision perhaps to put a weir in above the lakes, I was wondering how that is going to react with the salt coming down the river.

If it does not go into the lakes, what happens? Does it back up and the river becomes increasingly salty because it is not moving through? If you could take that on notice, I would be interested.

Mr Slatyer—Yes.

CHAIR—I thank officials of the department. We hope to see you tomorrow as well. Mr Slatyer, you were reading from a document earlier on. Could you table that document, please, because a lot of the senators did not quite get the figures down as we were going.

Mr Slatyer—The updated figures? We will provide a little one-pager showing those for you.

CHAIR—Please table that for us, thank you.

[5.18 pm]

HANKINSON, Ms Amy Lea, Coordinator, Inland Rivers Network

CHAIR—Welcome. I invite you to make a very brief opening statement before we go to questions.

Ms Hankinson—I would like to thank you for the opportunity to comment on this and to extend our congratulations for your swift action in pulling this inquiry together. We have outlined a number of options and recommendations, and you will have a written submission to that. But our key recommendation is for a major and immediate targeted water purchase in the Murray and Darling systems by the Commonwealth government to avert the ecological and social crisis in the Lower Lakes and Coorong.

In terms of volumes of fresh water required in the area, we have seen evidence that argues the point that the quantities of fresh water required will actually be variable on seasonal conditions and other conditions. Given that, we strongly recommend that any decision to use sea water to maintain the lake level is avoided until the last possible minute and that, rather, a significant buy back of water entitlements is chosen so that, when it does rain, water can flow back to the Lower Lakes and Coorong.

We have outlined a number of options and opportunities in the Darling in previous work and I can provide the proposal and another paper as an attachment to the submission we have made. We are currently unclear as to how much of the water remains from the proposals as time has passed since we put them up but we would like to point out that, if these properties had been purchased prior to the summer rains and floods in the Darling, looking retrospectively, the Lower Lakes and Coorong would not be in the condition that they are in now or there would be more water in Menindee available for release for those lakes. The options in the proposal we put up were not an exhaustive list and there is no silver bullet out there but the approach of purchasing properties and/or entitlements is the key way to return the system to health.

We also would like to see a significant purchase of water entitlements in the southern connected system, particularly the Murray. There is nothing to lose and everything to gain from a major buy back of water entitlements for the environment in this southern system. Clearly, this will have long-term benefits and is completely in line with the Water for the Future plan but there is significant potential for these entitlements to gain allocations when water does come into the system and provide the fresh water inflow needed for the Lower Lakes and Coorong.

We have recently seen a number of allocations of water in New South Wales systems in both the Murrumbidgee and the Murray and it should also be noted that water entitlements can be acquired very quickly. It is widely known amongst water brokers and agencies that have been involved in water purchase that entitlements can be purchased within six to eight weeks. We do however note that the effective implementation of this option that we are suggesting may be undermined by the continued existence of the four per cent cap on a permanent trade out of irrigation areas. Hence, we would strongly recommend to the committee that the validity and reasoning behind the retention of this impediment be assessed immediately to determine whether

it should be removed in light of the environmental and social emergency in the southern part of the system.

We have also outlined a potential option to utilise some of the water in Menindee Lakes to try to get it to the southern part of the system. For example, a great deal of the water in Menindee appears currently to be earmarked to underpin conveyance losses that New South Wales would otherwise meet with water from Hume Dam. The potential would be to take the usual approach to fulfilling these commitments through the water that flows into Hume Dam and then use the water in Menindee for the Lower Lakes and Coorong.

CHAIR—Do you have much more to go through because we really are short of time and I know senators want to ask some questions? Sorry.

Ms Hankinson—I have a couple of sentences. I will be quick. We have also outlined that there is a significant amount of environmental water in the Murrumbidgee that has been borrowed and not repaid. This water could be replaced immediately as inflows come into that system and potentially borrowed to assist the environment in the Murray system. In regard to the option of opening the barrages, IRN strongly recommends that this option is not taken. It should only be considered as a last resort option after all opportunities for water entitlement have been tried and exhausted because of the irreversible damage it would cause to that system. Thank you.

Senator SIEWERT—I want to go to the issues around Menindee Lakes and I am going to throw to Senator Hanson-Young in a minute. Could you clarify your comments around Menindee Lakes and the Hume Dam and conveyance losses and articulate that a little bit more? If I understand you correctly, you think there is water in Menindee and some in Hume as well—I am trying to find out what you mean about the water that is there for conveyance losses.

Ms Hankinson—My understanding of the situation is that New South Wales as a state has an obligation to provide conveyance water and for getting water to South Australia. This is normally done through setting water aside in the Hume Dam as inflows come in. Since water has flowed into the Menindee Lakes due to significant rainfall in the Darling Basin, water will be used in Menindee Lakes for meeting that conveyance water. Our impression is that water in the Hume can now be more immediately allocated to irrigation because that conveyance requirement is already met. Our proposal is rather to follow the normal procedure of setting aside inflows in Hume to meet those conveyance requirements first and then use water in Menindee to get to the Lower Lakes and the Coorong.

Senator HANSON-YOUNG—You have clearly outlined already that flooding the lakes with saltwater is not an option that you would prefer. We have heard from some of the other witnesses over the course of the last week that there are other options, even if we cannot get the freshwater that we need by summer, in terms of mulching and liming, to try to keep the acid sulphate soils at bay. Is that something you have looked at? Obviously we all want to get freshwater down the river system but, if for some reason we are not able to do that by summer—and as you have said there is no silver bullet—is that an option that you think would be viable?

Ms Hankinson—The information that we have seen on those options certainly indicates that they are worthwhile to consider and utilise in an effort to deal with the acid sulphate situation in the Lower Lakes and infinitely preferable to lowering the barrages and flooding the area with

seawater for the reasons that we have outlined. Those sorts of options should certainly be considered particularly in combination with a number of opportunities to get freshwater into the system. We strongly recommend looking at a mix of options and not simply dealing with them exclusively.

Senator HANSON-YOUNG—Have you done any research, or do you have any information about the impact on the Mount Lofty Ranges and those small rivers and streams that are connected to the Lower Lakes system? What impact will the saltwater have on them?

Ms Hankinson—I am afraid that we do not actually have information on those areas. Our work is focused on the Murray-Darling and the larger systems upstream. Sorry about that.

Senator BIRMINGHAM—Concerning the pace of legislative reform—and I note your submission in particular highlights the continuance of the four per cent trading cap—what is the perspective of the network on that pace of reform?

Ms Hankinson—It needs to be recognised that obviously this crisis is going to happen throughout the system and there is a real need to ensure that the pace of reform reflects the urgency throughout the whole system. We need to ensure that we have a balance between the method of reform in terms of legislation and planning that is well informed whilst also recognising the emergency.

Senator BIRMINGHAM—Have you seen any valid justification for keeping the four per cent cap in place?

Ms Hankinson—No, issues such as that certainly need to be considered and removed particularly where they stand in the way of actually getting the job done in terms of positive and proper action on the ground.

Senator HEFFERNAN—Besides yours, what is the background science to this report?

Ms Hankinson—Which report are you referring to?

Senator HEFFERNAN—This report you handed out today. How many people are in the Inland Rivers Network? Do you have a batch of scientists tucked away somewhere?

Ms Hankinson—I do, and Bachelor of Law.

Senator HEFFERNAN—No—do you have a group of scientists that inform you on this or do you take this from other sources?

Senator HANSON-YOUNG—I do not think the senator understands what the network is about. Is that the question?

Senator HEFFERNAN—No.

Senator HANSON-YOUNG—Even I am unclear about what the question is.

Senator HEFFERNAN—You have talked about six properties in the Darling. The Darling is one of the few systems where the land is still tied to the water, right? So you say buy the property.

Ms Hankinson—Some of it, not all of it.

Senator HEFFERNAN—Given that Tom Hatton and others have absolutely put it on the record that water from up there does not do anything at the bottom of the river, what are the six properties?

Ms Hankinson—The six properties outlined in a proposal that we put previously include Toorale Station, Darling Farms, Cubbie Station, Balandool Station and Tandou and Colly farms.

Senator HEFFERNAN—Would you explain to me how, if you bought Cubbie Station, that would return any water to the system?

Ms Hankinson—There would be a range of amounts of water returned through the decommissioning of storages and diversion channels and that water could be protected, effectively, through administrative arrangements in the system.

Senator HEFFERNAN—The Culgoa has a very small capacity, but the flood plain has a huge capacity. I accept the proposition that it would do great things for the flood plain, but what good would it do in the average year for the system? We would need to spend \$260 million to buy the land at Cubbie and to buy back licences that are not yet issued. Have you actually worked out what amount of water would return to the river system as opposed to the flood plain?

Ms Hankinson—The flood plain is a critical part of the river system, particularly in the Darling basin—

Senator HEFFERNAN—I accept that it will do the flood plain the world of good.

Ms Hankinson—and one of clear benefits of this is not only the water that will come back into the system as a whole but the broader multiple benefits for the entire river system, including the health of the flood plain, and that is critical in this whole water reform process.

Senator HEFFERNAN—I understand all that. So the benefit of your proposal would be more to the flood plain than to the river. No water would get down the system other than in a large event—a 1,500 gig event on some of these rivers. But a normal event of 400 or 500 gigs would not be enough.

Ms Hankinson—There will be a significant benefit. You are very aware of how complex the entire river system is and how many elements within that would benefit from a range of small and large events. It is critical that we protect them.

Senator HEFFERNAN—In terms of spending the taxpayer's dollar to the best effect to return water to the system, the bulk of value, other than the licences that are not yet issued for Cubbie and Balandool and those places—which really should be issued based on the capacity of the system to stand the extraction rather than on what has happened in the past—the benefit is

really the land. Why are you acquiring all this land? Why would you not go and buy allocated water if you wanted to return water to the system? Why buy all this land?

Ms Hankinson—We put up a proposal that suggested the purchase of land and/or water entitlements. As you have quite correctly pointed out, there are a number of water entitlements in the Darling system that are still attached to the land title. There is a significant amount of infrastructure that takes a range of water that would otherwise flow through the system. You may not know that the Condamine-Balonne system in total is one of the key tributaries to the Darling basin, providing on average about 20 per cent of that inflow, and that is not including all the water that has gone to the health of the environment and the nationally listed flood plains in that area.

Senator HEFFERNAN—So do you think the government should issue a whole lot of licences now and then buy them back? Do you think that is a fair thing for taxpayers? That is what you are proposing.

Ms Hankinson—Our comments have not been directed at the planning process in Queensland that I presume you are referring to. We have raised a number of ongoing concerns about the validity of that planning process signing off on licences that are clearly overallocated and in breach of the Murray-Darling Basin cap agreement. I agree with you in that regard.

CHAIR—Senator Heffernan, I will have to go to Senator Wortley before we run out of time.

Senator HEFFERNAN—It is just a waste of time. We cannot even get to the bottom of anything.

Senator WORTLEY—Given that the government has commenced a northern basin tender to purchase water for the environment, can you tell the committee about some of the environmental assets and values in the northern basin that are most in need of more environmental water and also about the priority uses to which this environmental water should be put? In addition, what are some of the difficulties and trade-offs involved in delivering scarce environmental water reserves between these competing needs in the northern basin?

Ms Hankinson—In regard to values within the Darling Basin, there are a huge number that I will have difficulty in covering right now. There are over a dozen areas of wetland and flood plain that support hundreds of thousands of breeding waterbirds. There are approximately four wetlands that are Ramsar listed because of their international significance, particularly for waterbirds. The Darling Basin contains and supports a number of highly threatened and endangered species and ecological communities, including the aquatic community within the Darling River system and a number of its tributaries—it is all listed as an endangered community as a whole. It supports a number of our highly threatened native fish species, of which there are only approximately 10 per cent of their number remaining now compared to 200 years ago. So there are a huge range of environmental values within the Darling system in its own right, and we strongly support the purchase of water entitlements and, wherever possible, achieving multiple benefits through land and catchment management to protect those assets.

Senator WORTLEY—So what are some of the difficulties and trade-offs involved in delivering this between the competing needs?

Ms Hankinson—There are clearly issues around the environment's needing and being used to 100 per cent of the water. Clearly, there has been development in the past few decades in the Darling system for irrigation and communities within which some of these industries are based. There are also a number of needs within the basin: flood plain grazing, properties who have in fact lost a significant amount of their revenue and people within their community because of a shift of wealth upstream through the creation of these irrigation communities and that sort of thing. There are a range of those historical and familial ties with these areas that need to be considered. There are also a number of highly culturally significant areas and communities within that system, and the needs of those need to be considered as well.

Senator WORTLEY—So there are enormous difficulties in—

Ms Hankinson—The reason that water reform has been so difficult and slow in the past is because of the range of competing needs. Clearly, one of the key things to draw from this is that these communities all through the system depend on a healthy river and a healthy environment. Nowhere else is this clearer than in the Lower Lakes in Coorong, where communities are facing complete upheaval and destruction of the very resource and the place that they value. This is a problem that is going to happen increasingly up through the system. We are already seeing it with people on farms who are being faced by the wetlands they depend on dying.

Senator WORTLEY—Given the evidence we have already heard on the high transmission issues that can be expected in sending water from the northern basin to the Lower Lakes, do you advocate purchasing water currently held in private storage in the northern basin to put into the Lower Lakes?

Senator BIRMINGHAM—Yes. It is in the submission.

Ms Hankinson—Yes—

Senator WORTLEY—Which we have just received.

Ms Hankinson—We certainly think that that needs to be strongly considered, particularly if it can be done at the same time as the permanent purchase of those entitlements so that we can have ongoing benefits. I need to point out that, from an environment perspective, there is not really an issue with transmission losses. The entire environment and wildlife within the Darling system is also struggling, although it is not as critical at the moment as the Coorong. The water that we call transmission losses is actually going to the environment and keeping wildlife alive in those areas all the way down.

Senator WORTLEY—Have you done any assessment of the practicalities of returning water from on-farm storages to the rivers—of the practical issues involved in shepherding this water downstream and of the likely cost of this water on the temporary water market?

Ms Hankinson—I have heard and been given estimates of potential cost on the temporary market. I can certainly take that on notice and get more information from the department, but they may be better able to provide you with that information. We have also gained a range of information in terms of how that water can be shepherded through the system. We have been told

by the New South Wales department that they would be able to put the appropriate administrative arrangements in place to ensure that that water is protected for the environment.

Senator WORTLEY—Can you tell us where you stand on recent calls for the Commonwealth government to take over the Murray-Darling Basin, including powers to change state water plans, powers to make annual allocation decisions, powers to override the Murray-Darling agreement and powers to compulsorily acquire water for the environment? Do you think the basin states and other key stakeholders are likely to back such a proposal?

Ms Hankinson—I certainly think that sort of approach needs to be considered, because we are dealing with a rapidly unfolding crisis that is going to continue throughout the system. We need the Commonwealth government to be in a good position to make the appropriate leadership choices to deal with this problem for all of the communities and the environment in the Murray-Darling Basin.

Senator WORTLEY—Is that the official position of your organisation?

Ms Hankinson—Yes, it is.

Senator HANSON-YOUNG—Earlier this week in South Australia the water minister reallocated the water allocations for South Australian irrigators, yet there was no allocation put aside for the actual river, despite the fact that we know we have got a crisis in the Lower Lakes and the Coorong. What is the opinion of your organisation in relation to that? Obviously we need to be striking a balance. We have these struggling communities who are on less than 15 per cent allocations, but we also have a rapidly drying Lower Lakes and Coorong system. Can you give me some information about how you would foresee that being balanced?

Ms Hankinson—We certainly appreciate that there are a number of communities and industries in significant difficulty because of the ongoing drought conditions, but we do note that, at the moment, whilst a number of sequential allocations have been made to various irrigation areas, unfortunately to date none of this water has been set aside as any part of a strategy to avert the crisis in the Lower Lakes and Coorong. From our perspective, this appears to be continuing with the ‘business as usual’ approach that has led us to the level of overextraction that we see throughout the system now.

Similarly, the retention of the four per cent cap on permanent trade out of areas is another indication that there are strong efforts to try to maintain the status quo, despite all the signals we are seeing, from both the environment and socially, of the need to make significant changes within the system. We need to ensure that we do set aside inflows as they are coming in now to try and deal with some of these environmental issues. That approach, as well as a significant buyback of entitlements, means that we can more effectively reflect the crisis and the need to save the Lower Lakes and Coorong and the community in that area. Those two outcomes cannot be separated.

Senator HEFFERNAN—The department has just told us that the water is not in the system. Do you think that it is?

Ms Hankinson—I am not quite sure exactly what you are referring to, but I would—

Senator HEFFERNAN—You are worried about getting water to the Coorong—we are all worried; that is why we are here. The department has just told us that there is not the water in the system. Where do you think the water is?

Ms Hankinson—There is water in the system, as we have seen. Allocations have been made to a number of irrigation areas.

Senator HEFFERNAN—I am talking about water that can actually get to the bottom of the system.

Ms Hankinson—One of the reasons we are advocating for a very significant buyback of permanent water entitlements is to ensure that when water does come into the system it will be used for the environment. Otherwise we will continue to see the situation where irrigation allocations increase and we still do not seem to have this water that is available for the lower area.

Senator HEFFERNAN—Right, so that is very sensible. What is your attitude then to the issuing of all those licences under the ROP of the Lower Balonne given that you say there is a huge shortage? You have just said, ‘We shouldn’t be. We’ve got to be careful. It’s overallocated’. Why then are we issuing all of these licences?

CHAIR—We will have to make that the last question for reasons of time.

Senator HEFFERNAN—I mean, how stupid is that?

Ms Hankinson—Issuing a number of licences and legitimising a number of currently unauthorised extractions in the Lower Balonne is completely at odds with the information we have in that part of the system that it is overallocated and the level of extraction is extremely high.

CHAIR—Sorry, we have gone over time. Thank you very much.

[5.47 pm]

HARRISS, Mr David Andrew, Deputy Director General, Water Management, Department of Water and Energy

CHAIR—I welcome Mr David Harriss from the New South Wales Department of Water and Energy. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude questions asking for explanations of policies or factual questions about when and how policies were adopted. Officers of a department are also reminded that any claim that it would be contrary to the public interest to answer a question must be made by a minister and should be accompanied by a statement setting out the basis for the claim. The department has lodged submission No. 65 with the committee. Do you wish to make any amendments or alterations to that submission?

Mr Harriss—No.

CHAIR—I invite you to make a very brief opening statement before we go to questions.

Mr Harriss—Thank you for the opportunity to give evidence on behalf of the Department of Water and Energy. By way of an opening statement I will focus on the first of the inquiry's terms of reference, particularly how much water is required to replenish the Coorong and the Lower Lakes and the options for sourcing and delivering that water. I would also like to address some of the water management arrangements in New South Wales relevant to the Murray-Darling Basin. In terms of water for the Lower Lakes, the Lower Lakes are not the only environmental asset in the Murray-Darling Basin that is suffering from the effects of continuing drought. For example, in New South Wales these would include: the Macquarie Marshes in the Macquarie Valley; the Gwydir wetlands and the Great Cumbung Swamp in the Lachlan Valley; the Lowbidgee wetlands in the Murrumbidgee Valley; and the Barmah-Millewa forest, Perricoota and Koondrook forests, and Werai forest, and their associated wetlands, in the Murray Valley.

In New South Wales in recent years we have been providing water wherever we can to ensure that there is no long-term, irreversible environmental damage caused to these wetlands as a consequence of drought. New South Wales is now working cooperatively with the other basin states in adopting a similar approach to the Lower Lakes—that is, collectively to ensure that there is no long-term, irreversible environmental damage to the Lower Lakes system. In the case of the Lower Lakes and the Coorong, this means not allowing the lakes to fall below levels that would cause acidification. This is not the same as providing sufficient water to replenish the lakes to their normal operating levels or to facilitate tourism or other industries; it is to protect against long-term environmental degradation.

In regard to water management in New South Wales relevant to the Lower Lakes, New South Wales is often reported as being grossly overallocated in its water resources. To put this in perspective, New South Wales constitutes 57 per cent of the Murray-Darling Basin and uses on

average 50 per cent of the basin's surface water, commensurate with its land area. New South Wales has agreed to a long-term cap on its diversions and is compliant with the cap in all of the valleys in the basin. New South Wales also has a tiered water allocation system, which means that we will use more water in wet years and less water in dry years. This is an appropriate policy that recognises climatic differences. It probably means that New South Wales is pretty well placed to adapt to water shortages, more so than other states which have a one-tiered system of entitlements. For example, the cap in the Murray Valley in New South Wales is on average 1,870 gigalitres. By comparison, the cap in South Australia is 700 gigalitres. However in both of the last two years, 2006-07 and 2007-08, use in the Murray Valley in New South Wales has been less than that in South Australia for consumptive purposes. So we are adaptable in terms of how we allocate water during dry years.

New South Wales has introduced water-sharing plans since 2004 in all of its regulated river systems in the basin. That is to ensure that average diversions are below the cap. On average the water that is provided for the environment under those plans will return over 200 gigalitres to the environment each year. This will mainly be realised in wet years, and of course we have not seen many of those in the last few years. The priority for water use in New South Wales during a water shortage is basic rights for domestic purposes. That is followed by the environment, although the volumes are not specified. That is followed by high-security and then general-security users.

As I have pointed out, we have a two-tiered system of allocation in New South Wales where our high-security users, which constitute about 10 to 15 per cent of our water use in regulated river valleys, have a very high-security entitlement. That is usually secure enough to guarantee 100 per cent of entitlements in just about every year. The way we have determined that security is using the previous worst minimum inflow sequence in doing the modelling. Of course in the last couple of years we have exceeded that previous worst inflow sequence and so we are now making automatic adjustments to the reliability. For example, our high-security users in New South Wales in the Murray Valley now have 50 per cent of entitlement. Our high-security users in Murrumbidgee Valley have 75 per cent of entitlement. By comparison, the Victorian Murray Valley users have six per cent of entitlement. The Victorian Goulburn Valley users have four per cent of entitlement. In South Australia they have 11 per cent. At the same time, however, our general-security users, which constitute most of our opportunistic water use, have zero per cent allocations. In the Murray Valley this will be the third year straight of zero allocations.

In unregulated rivers water users also have a volumetric entitlement where they can divert water above nominated pump heights, which they would then typically divert to on-farm storages—because, as unregulated rivers, they do not have the use of regulated storages above stream. So they are able to divert more than their average annual entitlement in any particular year but must stay within an average over a sequence of years. In the Barwon-Darling rivers, which I think we have been talking about probably for the last week, water was diverted from flows in the beginning of this year. This was the first access since 2005-06. The diversions in the beginning of this year, 2007-08, in the Barwon-Darling were 220 gigalitres in total. This compares with an average cap of 173 gigalitres and compares with total flows of 830 gigalitres, which were recorded at Wilcannia. Since summer, however, there has been no effective inflow into the Barwon-Darling rivers and the Barwon-Darling has stopped flowing downstream of Louth.

The Menindee Lakes has been managed under the Murray-Darling Basin agreement. It has been under New South Wales control since March 2002. Effectively that is there to provide water for Broken Hill and the far west of the state during drought. Three times in the past five years we have had to cease flows from the Menindee Lakes into the lower Darling to conserve water. For the lakes to revert to MDBC control it would require water to be diverted into the two larger lakes in the system, and they have both been dry since 2003. That would require a minimum of 400,000 megalitres, or 400 gigalitres, to provide any water to be able to be re-diverted back into the Darling River. So you would see significant losses, if we were to divert water into those lakes, before any water would become available.

On the potential to provide water from the Menindee Lakes to the Lower Lakes, New South Wales previously committed 109 gigalitres of water from Menindee to underwrite the critical human needs and to underwrite the conveyanced losses required to deliver those critical human needs in the Murray Valley. As inflows into the Murray Valley have increased during the year, we have been able to reallocate that water to meet some of New South Wales's own requirements. At the moment we have committed 180 gigalitres notionally of water remaining in the system to be diverted into the Murray system, and those releases started last Monday. This will enable us to provide our high-security needs in the Murray, to deliver carryover of unused water from last season and to provide stock and domestic supply into our tributary rivers and also into our channel delivery systems. I can just add that we do not have enough water to meet those full requirements yet, nor have we set aside any water for critical human needs or conveyanced losses for next year.

On the options for the use of that water, New South Wales believes if it is considered necessary to provide additional water to the Lower Lakes over and above that to prevent acidification then New South Wales would preferably support market mechanisms. To facilitate that, New South Wales has relaxed the trade rules from the lower Darling to the Murray this year, so that can get some water that would otherwise be used in the lower Darling into the Murray system, but we also recognise that losses from further upstream at the current time would be excessive. Thank you.

CHAIR—Thank you very much, Mr Harris.

Senator HEFFERNAN—You say that 50 per cent of the landmass of New South Wales is the Murray Darling Basin and we use 50 per cent of the water, but what percentage of the run-off is in New South Wales?

Mr Harriss—New South Wales generates about 65 per cent of the surface water flow. That is assuming that the Murray River is counted as New South Wales and not as a shared resource.

Senator HEFFERNAN—Obviously 38 per cent of the run-off comes from that two per cent of the landscape—and Victoria, I am sure, would argue differently. We are going to extend this a little bit so I just want to get some things down, Mr Harriss. The Toorale arrangements: what input did your department have into that?

Mr Harriss—We provided advice about the licence entitlements on Toorale.

Senator HEFFERNAN—Is that all?

Mr Harriss—Pretty much that is all.

Senator HEFFERNAN—Could you give this committee the details of the licence entitlements?

Mr Harriss—Not off the top of my head. I could take them on notice.

Senator HEFFERNAN—Yes, I want you to take them on notice. I have actually got them in my head, but I would like you to do that. In amongst those licences, there is a 1,652-hectare area licence, strangely—it popped up. How come that is there?

Mr Harriss—Area licences were allocated under the Water Act 1912. That was because it was an unregulated river where there was no volumetric—

Senator HEFFERNAN—I understand that. We had them on the Lachlan; we were originally given area licences in the sixties. But I thought we would have done away with area licences.

Mr Harriss—There are still area licences and the ability to irrigate that particular area, but in all other parts of New South Wales, other than the Western Division, those area licences have also been converted into a volumetric allocation.

Senator HEFFERNAN—So why aren't they?

Mr Harriss—They have not been converted into a volumetric allocation in the Western Division. I do not know off the top of my head the particular reasons for that.

Senator HEFFERNAN—But wouldn't it make sense?

Mr Harriss—It did make sense in terms of providing volumetric limits on the extraction of water in those areas.

Senator HEFFERNAN—Do you propose to convert those licences to volumetric?

Mr Harriss—It is not an immediate priority, but there is no reason why they should not be.

Senator HEFFERNAN—There are about 5,000 acres pegged out on Toorale. They have an 8,000 variable licence on the Darling. They have a 6,000—6,000 and a bit—on the Warrego. They have a 900 and an 1,100 on a couple of banks—

Mr Harriss—Yes.

Senator HEFFERNAN—They have a 1,652 area licence. They have a 65 A licence and a B licence, which I think is 1,200, on the Darling. So that is what you are going to give us on the record.

Mr Harriss—Okay—

Senator HEFFERNAN—if you could put that on the record for me that would be good.

Mr Harriss—You could email that to me, Senator!

Senator HEFFERNAN—You have just said, and we heard the same evidence from other people, that buying water up there is a fantasy and that the Menindee Lakes thing is a fantasy. I am pleased that you have put on the record here today that it is going to take 400 gigalitres to get it into the lake so that they can then transport it, and the lakes, as you say, have not had any water in them for years. In terms of the purchase of Toorale, wouldn't that be a very inefficient way to get water into the system for \$23 million to \$24 million?

Mr Harriss—Without commenting on the price, what the water purchased from Toorale will allow is water to run downstream into the Darling River. That will provide different benefits, depending on the antecedent conditions. If it comes in now when it is dry, I do not think that it would get too far. But if it came in when it was at a reasonably flow, then it would provide 20 gigalitres, minus the proportion of losses, down to the Menindee Lakes.

Senator HEFFERNAN—And in every year but one year, which was two years ago when there was a reasonable event in the Warrego River there has been a reasonable even in the Darling. Have you been there to see the difference that the pipes have made to the banks that they have been put through?

Mr Harriss—I have not been on site, but I have certainly seen many photos of the pipes.

Senator HEFFERNAN—They let about 1,000 megalitres through. The bottom end flow generally in a reasonable event is 2,000. There is about 20,000 acres of flood in a normal event and it goes out about 30 to the west and joins the Darling there. Regarding the task of returning water to the system—and I realise that the Rivers Network and the lady down the back of the room there thinks that this is fantastic—I think that there are better ways to apply the money if you are looking for water. Do you think that this is an efficient way of buying water—buying a property of 220,000 hectares which has 30,000 sheep, 800 cows and, tucked away in one little corner, 4,000 to 5,000 acres of irrigated land, of which they use about two-thirds in any one year? The country is worth between \$30 and \$35 an acre. They valued it at some outrageous amount of money for the purpose of this exercise. Wouldn't they be better of using that money to buy water where the land is already separated so that you can get the water without the land?

Mr Harriss—I do not think that it is appropriate for me to comment on the benefits of purchasing land, because that has been the government's decision. I would be prepared to comment on the benefits that that water could provide. As I have said previously, the benefits that it will provide will depend on the antecedent conditions and the conditions at the Darling River at the same time. If that water can back up from the Darling, then it wets flood plain; otherwise, it stays in channel and, depending on the conditions, will provide particular in channel benefits downstream.

Senator HEFFERNAN—Mr Harriss, have you taken a mean of the additional flow that this would have provided historically? Bear in mind that we are looking at the future. We are saying that we are going to lose from a quarter to a half as runoff in the system anyhow. Have you done any calculations to provide information to the Commonwealth government as to what real water

this will return? Everyone is running around saying that it is going to return 90,000 megalitres. How much is it going to return?

Mr Harriss—My understanding is that on average it might return 20,000 megalitres. Yes, we have had some discussions with the Commonwealth.

Senator HEFFERNAN—That is all right. Can you inform the committee about the snow melt last year?

Mr Harriss—The snow melt over the last couple of years has been a bit different to what we have been used to because of drought. In normal years, when we get rainfall in the spring months you usually find that thunderstorms will cause the snow to melt pretty quickly and generate a fair bit of inflow into not so much the Murray but the Ovens catchment from the Victorian Alps. In the east of the ranges, a lot of the snow melt then goes into the Snowy Mountain storages Eucumbene and Jindabyne. What has happened in the last couple of years during drought is that we have found that a lot of that snow has evaporated rather than melted and so we have not had the benefits of—

Senator HEFFERNAN—So was a calculation done last year on how much melted and how much evaporated? Can you do that? Did we calculate how much we got in the melt?

Mr Harriss—We certainly would have calculations about how much flowed in at any particular time, because that has contributed to the minimum inflow sequence that we are currently experiencing.

Senator HEFFERNAN—There is a much bigger snow load this year, I understand. But if we get a hot and dry period now for a month, have you made any calculations on what the melt might be for this year?

Mr Harriss—No, my department has not made any specific calculations. We would probably default to the Murray-Darling Basin Authority to do that. But what we do in terms of planning for our water availability and our water use is go on the minimum sequence that we have previously had. That would include conditions in which the snow has effectively evaporated before melting. What we are running on now is the 2006-07 inflow in the southern part of the state, which was typically 40 per cent below the previous recorded minimum inflow sequence.

Senator HEFFERNAN—So the run-off in the last two seasons, as a percentage of the mean average over the past 50 years—what would it be?

Mr Harriss—I do not know in terms of statistics, but it is substantially lower than we have had previously. That is why we have had a minimum inflow sequence which is 40 per cent lower than the previous—

Senator HEFFERNAN—Would it be as low as 30 or 35 per cent of the—

Mr Harriss—I will take that on notice. I would not like to answer that off the top of my head.

Senator HEFFERNAN—Obviously this committee is looking to see if there is water in the system. The government officials we talked to earlier today actually gave us an answer and then qualified it. The water is not in the system. If we were to take the water that is in the system and use it for the Coorong this year, if we do not get that snow melt and we get a dry autumn, it would be fair to say that, this time next year, we could be facing a catastrophe of unusual proportions in terms of human whatever you call it—Senator Fisher is always talking about it; what do you call it?

Senator FISHER—Human critical needs. That is because the department and the government are always talking about it.

Senator HEFFERNAN—So what is the scenario from the New South Wales perspective?

Mr Harriss—From the New South Wales perspective, we are not in the Sahara desert; we would use the minimum inflow sequence we have previously had. It is not as if there are ever going to be no inflows.

Senator HEFFERNAN—I understand that.

Mr Harriss—Where we are currently is that previously in the Murray and the Murrumbidgee the minimum inflow sequence has been underwritten by Snowy Hydro diversions, which would be enough to meet all of our conveyance losses and all of our critical human needs. What we have found in the last two years is that, with the new inflow sequence, that is not the case, so we will now have to start reserving water later in the season to ensure that we do meet those the following year.

Senator FISHER—What do you mean in that context by ‘critical human needs’?

Mr Harriss—Under the senior officers group, it is the minimum requirements to maintain your domestic needs and the needs of industries without which there would be significant economic and social impacts or security issues. So we need to provide enough water to keep those communities ticking over, just.

Senator HUTCHINS—Do you have a definition?

Mr Harriss—The definition that we apply is effectively one which was included in the senior officers group reports to the first ministers.

Senator HUTCHINS—Do we have a copy of that?

Mr Harriss—Those reports were publicly available.

Senator FISHER—If there is a written definition of the term ‘critical human needs’ from which you are working, can the committee be provided with that?

Mr Harriss—Certainly.

Senator HANSON-YOUNG—You would be the only one we have seen that actually has a written definition.

Mr Harriss—Is that right? I do not think it is a very detailed definition, but it covers the basic human needs and those without which the economic, social or security impacts would be too great.

Senator HEFFERNAN—The argument is whether ‘human critical needs’ includes water for farmers to keep their enterprises going, which it obviously does not.

Senator HANSON-YOUNG—Or water for golf courses.

Mr Harriss—In New South Wales we did not include water for golf courses or water for horticulture within our definition of critical human needs. What we did in 2006-07 was, with the first water available in New South Wales, by preference give it out to high-employment industries, on the basis that, whilst they received it in the first instance so that we did not have too much social dislocation, they had to pay that back subsequently.

Senator HEFFERNAN—Was that how you overcame that Rockdale thing?

Mr Harriss—Yes.

Senator HEFFERNAN—That is a good example.

Mr Harriss—It was received well by our irrigating communities but, because we were effectively allocating preferentially, there were some who thought that was distorting the market. But at the same time we believed it was appropriate because we were caught out and it was the best way to actually ensure that there was not too much dislocation.

Senator HEFFERNAN—I do not disagree with that. I think that was all right.

Senator FISHER—If I can reiterate for the record: my question of Mr Harris was that Mr Harris or the department provide the committee with the written working definition of the term ‘critical human needs’. My further question arising out of that is: what is the consequence of water being so described?

Mr Harriss—The consequence—

Senator FISHER—I would like you to answer that in writing on notice but I am happy to hear you now as well if there is time.

Mr Harriss—You have asked me what the consequence is of not providing for critical human needs?

Senator FISHER—No, what is the consequence of water being described as water that is necessary for critical human needs?

Mr Harriss—The consequence from New South Wales' perspective is that we will now set that water aside as a priority that will apply in the subsequent year.

Senator FISHER—So it is essentially excised from the system in terms of others being able to access it? Is that so?

Mr Harriss—In the first instance, yes.

Senator HEFFERNAN—How much water is that, by the way?

Mr Harriss—In New South Wales in the Murray Valley we believe it is somewhere between 70 and 75 gigalitres per year.

Senator HEFFERNAN—And what is it in the Murrumbidgee?

Mr Harriss—I think that it is probably less than that.

Senator HEFFERNAN—The Murrumbidgee is in better shape—

Mr Harriss—In terms of delivery, yes, because what we have to include in that critical water supply is the provision of water for channel losses in the Mulwala Canal, which delivers town water supply to Finley, Berrigan and Warcool. So we have a substantial conveyance loss that we also have to cover.

Senator HUTCHINS—Mr Harriss, we have had put before us and have had calls for an interim basin plan to come online very quickly. Do you have a view about what you think we should do in relation to that proposal? Should we snap it up and say, yes, there should be an interim basin plan immediately? What is your view on that?

Mr Harriss—Our view is that we have just completed very comprehensive water sharing plans for all of our regulated river valleys and we are completing water sharing plans for our unregulated river valleys, proposed by 2011. They define the environmental share within the particular water source from which you can then articulate the security of supply for water for consumptive use. We have already legislated in New South Wales that after the terms of those plans the first three per cent reduction will be borne by irrigators. Of the next three per cent, two-thirds will be borne by the Commonwealth—one-third by New South Wales—and for anything over that six per cent, which is a liability that will be realised in 2014, the cost of any further reductions in water availability will be borne fifty-fifty by the state and the Commonwealth.

We have legislated for that, and in the development of the intergovernmental agreement through the Murray-Darling Basin reform we have asked that the Commonwealth, that will now be preparing the basin-wide plan which will establish how much water is to be recovered, should bear all of that liability. I am certain that if an interim basin plan were to be developed then that issue of liability would have to be considered.

Senator HUTCHINS—So you do not subscribe—

Mr Harriss—It all depends on the quantum of the changes to the caps in each particular valley and how much water would otherwise be not available to existing users.

Senator HUTCHINS—Can you give the committee the New South Wales government's views on the potential to purchase water on the temporary water market using either New South Wales or Australian government funds in order to boost the levels in the Lower Lakes?

Mr Harriss—As I said in my opening remarks, the New South Wales government is very supportive of not allowing the lakes to reduce to levels below which there will be acidification and long-term environmental degradation. We believe that, if any water over and above that is required, then it should preferentially be accessed on the market, whether that be temporary or permanent—presumably, temporary because that is water that is there in a particular year—and that that would be the responsibility of either South Australia unilaterally or the Commonwealth and South Australia in a bilateral arrangement.

But we will certainly be suggesting that there is no reason why the temporary market should not be the vehicle for getting that water. Under normal circumstances, when Menindee Lakes is in the control of New South Wales, we do not allow temporary trade of water outside of the Lower Darling into the Murray. But, because of the circumstances we are in now, we will guarantee that water will be flowing in the Lower Darling from the Menindee Lakes this year so that we can deliver that water. It might be traded. That will allow companies like Tandou, just south of Menindee, to choose whether to plant a crop or put their water on the temporary market. It could then be available in South Australia, Victoria or New South Wales in either the Murray or the Murrumbidgee Valley.

Senator SIEWERT—If I am understanding you correctly, what New South Wales is saying is, if water can be purchased on the temporary market for the Coorong and Lower Lakes, it is guaranteeing to provide conveyance water so that it can actually be got there.

Mr Harriss—Yes. The conveyance water for 2008-09 is guaranteed. South Australia have their 696 gegalitres under the agreement, which will guarantee at least about 300 gegalitres gets to the Lower Lakes. So, if water is purchased and it can be conveyed on top of that, it will get there. I have heard some experts suggest that there will be 50 per cent losses if water is bought from Tandou. That is not the case. There will not be any losses because we will be guaranteeing to run that river for this coming year. Under normal circumstances we do not allow it because we are in drought mode, and we have on three previous occasions in the last five years stopped water flowing into the Lower Darling to conserve water for Broken Hill. If we stop water and there is no flow in the lakes—and we have photos in our submission—then we obviously cannot guarantee delivery of that water downstream. However, this year, because of the circumstances, we have guaranteed flow in the Lower Darling for the year, so people who have allocations can then trade them down into the Murray-Darling.

Senator HANSON-YOUNG—What is the process for doing that? You are guaranteeing it. What arrangement have you got with South Australia, or—

Mr Harriss—Under schedule E of the Murray-Darling Basin agreement, there is arrangement that we cannot usually allow trade to occur from the Lower Darling. That is because we will not guarantee the flows—

Senator HANSON-YOUNG—I understand that—

Mr Harriss—So we went back and got the agreement of the Murray-Darling Basin Commission to agree to set that aside for 2008-09 so that we can allow trade to go from the Lower Darling into the Murray for this year. That is temporary trade only—effectively an annual lease.

Senator HANSON-YOUNG—So, if somebody in New South Wales says, ‘Okay, I’m going to give up my entitlement,’ and they actually have enough allocation to hand over as well, what is the tipping point, I guess, for you to guarantee that that flow will get down? What is the process for making that happen?

Mr Harriss—The tipping point for me to guarantee it or for New South Wales to guarantee it was that we had guaranteed 109 gegalitres out of the Menindee Lakes to underwrite critical human needs and the conveyance water required to deliver it. Normally we would not do that, but, because had we agreed to that through the senior officers group we were virtually assuring flows for this coming year, so we said, ‘That’s a different set of circumstances than we’ve previously had so we may as well allow water to be traded from the Lower Darling into the Murray.’

Senator HEFFERNAN—There is no guarantee further up the river, is there?

Mr Harriss—No. Below the upstream influence of the Menindee Weir there is no guarantee of flows at all. In fact, the flows have stopped now below Louth in the Darling River.

Senator SIEWERT—When did they stop?

Mr Harriss—They have stopped progressively. Since the summer flood event from Central Queensland, we have not had any substantial inflow events in the Darling River, and flows had receded in March. They have progressively reduced and probably would have stopped progressively from Wilcannia upstream over the last couple of months. I understand that similarly in the Condamine River they stopped for the last 10 weeks.

Senator SIEWERT—You say ‘the last couple of months’—and I appreciate you may not know off the top of your head now—could you supply the committee with more detailed information about when those flows did stop?

Mr Harriss—Certainly. We have daily flows at a whole lot of gauging stations throughout New South Wales published on our website every day.

Senator SIEWERT—Okay.

Senator HEFFERNAN—So the Darling Farms water—

CHAIR—Sorry, Senator; Senator Siewert does have the call.

Senator HEFFERNAN—I am assisting Senator Siewert.

CHAIR—Senator Siewert probably does not need your assistance; thank you anyway!

Senator SIEWERT—I have a whole range of questions so I realise I might have to put some on notice. Could you provide us with some information about how much water has been released from Menindee Lakes during this last season?

Mr Harriss—Off the top of my head, I understand we have released, up until about March or April, 160,000 megalitres. We then dropped the releases back to conserve water to minimums, which was, up until the end of last week, enough to guarantee 50 megalitres a day over what is called Burtundy Weir, which is probably 100 kilometres upstream of the influence of the Murray Weir pool. To maintain, we had flows going the length of the system. At the commencement of this week, we started to increase flows into the lower Darling from the Menindee Lakes to actually meet those requirements, which I talked about earlier, to put 180 gegalitres into so we can then supply South Australia from Lake Victoria. That gives us more water in Hume Dam that we can distribute for our stock, domestic and high-security needs in the New South Wales Murray.

Senator SIEWERT—What did you say, 160?

Mr Harriss—160 gegalitres from during the summer through to about March.

Senator SIEWERT—Where was that to?

Mr Harriss—That was released from the lower Darling and was re-regulated into Lake Victoria.

Senator SIEWERT—Thank you. When you said earlier that inflows had dropped—

Mr Harriss—In the Darling?

Senator SIEWERT—No, sorry, I am switching over to the Murrumbidgee and the Murray. If I understood what you said earlier, inflows had dropped and were not now meeting critical needs, so you now had to hold some in reserve.

Mr Harriss—Yes, there are two components to guaranteeing supplies in the following year for New South Wales. We have the minimum natural inflows that would occur on the western side of the divide. We also have what is called a required annual release from Snowy Hydro. Except when Snowy Hydro is in its worst drought sequence, those figures are 1,062 gegalitres, which comes from Snowy Hydro into the Murray system, and that is divided equally between New South Wales and Victoria under the Murray-Darling Basin Agreement. In drought times—like we are in now—it is divided three ways and 1,026 gegalitres comes from Snowy Hydro into the Murrumbidgee. Of course, it is all New South Wales water in the Murrumbidgee. Because we have been in the worst drought sequence, Snowy Hydro has been able to reduce its required annual releases into the Murray and the Murrumbidgee systems as well. So, we have minimum natural inflows being reduced by 40 per cent and we have Snowy Hydro being able to reduce its required annual release because it is suffering the same drought that everyone else is. This means that, whilst that water would have previously underwritten all of the conveyance and the high-security requirements in New South Wales, it no longer does so. The new minimum inflow

sequence means we do not have that guaranteed, so we will now have to set aside water in any particular year to meet that requirement in subsequent years.

Senator SIEWERT—So that is now ongoing?

Mr Harriss—That will be ongoing. Our water-sharing plans, which are statutory, provide for our water planning to be based on the minimum inflow sequence. They are almost self-correcting, which is not good news for general-security users, because that means there will be less water available.

Senator HANSON-YOUNG—I would still like some more clarification around the Menindee Lakes and the water that is held there. You are saying that you have guaranteed the flows if we are able to get more water from further upstream to move down to South Australia.

Mr Harriss—No, sorry, I can guarantee flows from the Menindee Lakes—

Senator HANSON-YOUNG—If there is any other water, though, it is that conveyancing that you are helping with, in terms of the 190 gigalitres.

Mr Harriss—We are over helping conveyancing now. Because there have been some increases in flows into the Murray system, we can almost look after it ourselves. However, that does not provide enough water in Hume and Dartmouth dams for New South Wales to meet its high-security needs or its carryover or its stock and domestic needs, so we will still be putting—

Senator HANSON-YOUNG—What quantity is that?

Mr Harriss—At the moment, we have 50 per cent high security, which is about 90 gigs. Total high security would be 180,000 megalitres. We have currently committed 30,000 megalitres to providing a pulse of water into the Wakool River system to provide stock and domestic water. If we were to maintain that at the usual levels, we will probably need another 30 or 40 gigalitres. We have currently committed 70 gigalitres of water into the Murray irrigation systems and that will not meet all of the channel systems; it will only provide a focus down the main systems. We have not yet set aside water—or confirmed that we have set aside water—to meet some of the stock and domestic supply systems in other channel systems like West Corrgan, which has about 770 users west of Corowa, and the Moira Private Irrigation District, which is south of Deniliquin. So we are still short of water to meet all of our stock and domestic needs but we are using the water currently in the Menindee Lakes to underwrite that at this stage.

Senator HANSON-YOUNG—Remind me again exactly what the level is in the Menindee Lakes at the moment.

Mr Harriss—I have not got that off the top of my head but we are probably close to about 500,000 megalitres. We got up to about 610,000 megalitres and it has subsequently been reduced since about March to about 500,000 megalitres or thereabouts.

Senator HANSON-YOUNG—What is the calculation in terms of human critical needs for Broken Hill?

Mr Harriss—Broken Hill has an entitlement of 10,000 megalitres and it will probably use on average about 6,000 megalitres. But the issue about providing water for Broken Hill is that there is no storage capacity other than in the Menindee Lakes. Storing in the Menindee Lakes means that you have two metres net evaporation per year so you are going to lose significant volumes from evaporation whilst you are maintaining the water in storage for Broken Hill.

Senator HANSON-YOUNG—Is that calculated into the 10 gigalitres?

Mr Harriss—No, it was calculated into how much water you must maintain in Menindee and release to ensure Broken Hill's water supply, which we usually do to at least 18 months.

Senator HANSON-YOUNG—How much is that?

Mr Harriss—It depends on the season. It changes all the time. At the end of July when we last did the calculations, which we provided information on quite publicly, we required 217,000 megalitres of evaporation between the end of July and April 2010 before the Lakes dried out.

Senator HANSON-YOUNG—In terms of the water that you are holding in Menindee Lakes at the moment that is being underwritten, could you put that in writing for the committee so that I have got the right numbers in front of me? Could you include also the human critical needs for Broken Hill and the explanation about the evaporation?

Mr Harriss—I will explain the evaporation—I do not have a problem with that—but what I will say is that Broken Hill has got a need for 6,000 megalitres per year. To maintain that we need to maintain water in the Menindee Lakes.

Senator HANSON-YOUNG—Because there is nowhere else to store it?

Mr Harriss—There is nowhere else to store it. They do have a couple of local storages—Umberumberka Reserve and Stephens Creek Reserve. If you get a thunderstorm and that fills it, that then supplements some of their water. But I might also add that whilst we have been looking at maintaining the volume of water for the security of Broken Hill, if we get to next summer—the summer after this one coming—and we have not had any rain, you would not be able to drink it anyway. We have already had water quality in the Menindee Lakes where we advised that anyone with hypertension drink bottled water. You would not drink the water out of the Menindee Lakes.

CHAIR—You can take the second part of the question on notice.

Senator WORTLEY—Can you clarify some of your earlier comments. You spoke about conveyancing of water and that there would not be the 50 per cent loss that some people have spoken about. Can you elaborate on that a bit?

Mr Harriss—In the assessment of how much water would be available immediately if we were to make releases from upstream storages, there was a lot of media about incurring substantial losses, and there would be substantial losses—it depends on whether there is any flow in the river for a start. But just say we have got the conditions now when there is very little flow in the Darling River downstream of the Queensland-New South Wales border. If you were

to release water from Cubbie Station and you were to pump it out at reasonable rates—you would pump and not just blow the lot in one fell swoop—you would probably lose up to 70 or 80 per cent of the water before it got to Menindee Lakes. If you released water from further downstream around Bourke, which is probably closer to 600 kilometres, the losses would be about 50 per cent. One of the properties that was available was Tandou, which is downstream of the Menindee Lakes. As I have said before, we are running water down there all year so there would be no losses. We would be able to put the water that was purchased from Tandou station on top of our flows and so we would say there are no losses.

Senator WORTLEY—And that water would go how far?

Mr Harriss—We could get it anywhere in New South Wales, Victoria or South Australia. But there was only 9,000 megalitres. We have opened up for trade and I do not know how much water has been traded between then and now.

Senator WORTLEY—In relation to what you were saying earlier, is there a guarantee of some of that water being released?

Mr Harriss—If water is purchased in South Australia from Tandou, then we will deliver that this financial year. We will guarantee its delivery.

Senator WORTLEY—And the loss?

Mr Harriss—We will not charge any losses.

Senator WORTLEY—In relation to that, given the limited amount of temporary water available on the mark-up, what do you think the comments would be from irrigators in the western Murray irrigation areas, given the impact perhaps on their permanent plantings?

Mr Harriss—For the irrigators on permanent plantings, there is another source of water available to them which would otherwise have been limited to the lower Darling. What happened last year was that we had the inflows from the northern New South Wales floods and the Queensland floods and that enabled us to make an allocation of 100 per cent of high-security water in the lower Darling and 50 per cent of general-security water. We do not have too much general-security water. There is only about 30,000 megalitres allocated out there anyway in entitlements. So there was only about 15,000 megalitres of general-security water available. It came at a time when it was too late to plant a summer crop last year, so the users carried it over. They did not use it and they carried it over into this year. So they started this year with about 15,000 all up.

For a company like Tandou to deliver water to their farm, they are going to incur losses filling up their channel system in the first instance. So they lose a lot of water early and, unless they have high entitlements, then it is probably in their interest to sell that water rather than to use it and watch it go into the ground if there is no follow-up water. By opening up the trade, we have given them the opportunity to trade that water out into the Murray system, where it benefits high-security users or whoever chooses to purchase it. They get a cash flow rather than have the first initial losses and probably still not have enough water to get a viable crop, unless we were to get subsequent flows.

Senator WORTLEY—Are you saying it would not be of concern to them?

Mr Harriss—I think high-security users and owners of permanent plantings would welcome the opportunity to have more water on the market.

CHAIR—We are over time. Senator Heffernan and Senator Fisher, did you have one more wrap-up question that you wished to ask?

Senator HEFFERNAN—I have got more than a wrap-up. Can I just go to the department's thinking on the future. Can you paint a picture for the committee of, to the best of your knowledge, the decline in the run-off in the system in the last two years compared to, say, the mean average of the last 50 years?

Mr Harriss—Without going to numbers, it has been substantially reduced, for a number of reasons. We have had an extensive drought. It has probably gone, with a couple of blips in it, for about 10 years. What we now have is an incredibly dry catchment. Similarly, in some parts of the catchment areas, particularly in the south, we had significant bushfires, and the regeneration is thick, and that again—

Senator HEFFERNAN—And that is a thousand gigs gross and 600 net for the next nine years of reduced run-off.

Mr Harriss—Whatever the numbers are, it is contributing to a significant reduction in run-off. So we are witnessing that. Whilst we might have average rainfall, we will expect a substantially reduced run-off until such time as we have a few consecutive years of good winter-spring rains which wet up the catchment and enable run-off to be generated. Alternatively, you want to have very intense storms which run off very quickly. Other than that, if we get rainfall events which have good soaking rains, we will see very, very little run-off.

Senator HEFFERNAN—That paints the present picture. It is patently obvious to me that there is not water in the system to do the job they want us to do for the Coorong. Do you think there is water in the system to do the job?

Mr Harriss—Based on the numbers that were provided very early by the Murray-Darling Basin Commission, which were that you would probably need about 400 gegalitres over and above what we are contributing this year—

Senator HEFFERNAN—Over and above the transport and the—

Mr Harriss—Over and above what we can guarantee now to maintain the levels at what would be reasonably normal levels—then you would have to take that from the existing water that has been allocated. For example, we have 50 per cent of high-security water allocated in the Murray Valley; that is only 90 gegalitres. And 75 per cent allocated in the Murrumbidgee is probably closer 150 gegalitres. There is also some water that is being carried over, which is probably about 150 in the New South Wales Murray and probably closer to 200 in the Murrumbidgee. But that is being carried over for high-security planning—for high-security industries like the feedlots that you talked about previously. That water is reasonably fully committed for those purposes.

Senator HEFFERNAN—So would it be fair to say that the water is not available unless the water for places like Rockdale feedlot is put at risk?

Mr Harriss—It comes from water that has been allocated. There is no magic pudding—

Senator HEFFERNAN—So there is no unallocated water.

Mr Harriss—If it is given to one use it must come from another use at the moment. There is no spare water in the system.

Senator HEFFERNAN—We are all doing something with razor blades at the moment in the Riverina because we are about to lose our crops because of no rain. If this season is repeated next season in terms of your reserves and your options for the high-security users—the freight to the bottom of the river and Adelaide—where will we be at this time next year if we have the same thing next year as we have had this year?

Mr Harriss—With any future inflows after about October, we will have to start looking seriously at setting them aside and not allocating them so that we can meet those conveyance losses and meet our critical human needs for the subsequent year.

Senator HEFFERNAN—As you said, we have had 10 years of terrible runoff. What is the scenario in Albury or Wagga Wagga or elsewhere if the river fails? I do not think there is enough in the system.

Mr Harriss—At the present stage, there is a very low likelihood of that ever happening—that you would run out of critical water for towns on the main stream of the river. The reason is that, even with the worst inflow sequence we have had now, it is now very low and even if we put in the minimum required annual release from the Snowy, it leaves you a deficit of about 400 gigalitres. That is not a huge amount in the big scheme of things.

Senator HEFFERNAN—Consider if the water situation gets down to being like the global financial markets—where everyone is frightened. Do the likes of the pivots between Narrandera and Wagga Wagga, which are intercepting river water, have an impact that you would want to look at?

Mr Harriss—We are looking at the sustainability. The likes of the pivots in the lower Murrumbidgee aquifer that you are talking about are similar to the Murray aquifer. It is 100 metres down and the connection with the surface water is not great. There is a connection but it is not a significant connection.

Senator HEFFERNAN—Are there areas that would come at risk in terms of the connection?

Mr Harriss—Certainly the shallower aquifers. In the Murray Valley we put similar bans on the extraction of ground water from shallow aquifers to those we put on extraction from the river. We did this last year because in many areas they are directly connected. But the connection is not that great in the deep aquifers, which are 100 or 200 metres down.

Senator HEFFERNAN—We had some pretty passionate submissions in Adelaide the other day about the need to maintain the fresh water status—and obviously we received evidence that they ought to triple the sea water out. But if in its generosity the government puts a bag over its head and took the decision to send water away from the present work that it is allocated to, what would happen next year if it did not rain.

Mr Harriss—We are still—

Senator HEFFERNAN—Is there any thinking that the government would allocate next year's reserves to this Coorong exercise—that is what we are about, the Coorong?

Mr Harriss—On behalf of New South Wales, no, there is no thinking other than looking at maintaining the levels in the Lower Lakes to prevent acidification.

Senator SIEWERT—That is what people want.

Senator HEFFERNAN—Yes, but that is going to take 400 gigalitres, isn't it?

Mr Harriss—No, far from it.

Senator HANSON-YOUNG—No, 130.

Mr Harriss—In fact we estimate now that other than the pumping that is going on now there is no need to consider putting any further water in other than the 300 that is committed already. And there will be no risk of acidification beyond March next year—

Senator HEFFERNAN—Why are we having this hearing?

Mr Harriss—There are concerns about the long-term—

CHAIR—If Mr Harriss knows, could he tell us please? We have been asking the same question.

Mr Harriss—I am just presenting information to the hearing. At the moment we know that there is enough water to maintain the levels of the lakes to prevent acidification until about March next year. If we get a rainfall event and it generates local run-off on the western side of the Mount lofty Ranges, as has happened over the last six weeks, that increases the levels of the Lower Lakes too and that delays the need to make a decision.

Senator HANSON-YOUNG—Where do you get that information?

Mr Harriss—That information is readily available to the Murray-Darling Basin Commission.

Senator HANSON-YOUNG—That is what you have based your estimates on. You are saying March.

Mr Harriss—The information has been provided to me as Deputy Commissioner of the Murray-Darling Basin Commission that the trigger levels below which acidification is likely to manifest itself is about minus one metre, that we are unlikely to get to those levels before March next year and that if we were to have a rainfall event such as we have had in the last month in South Australia then that can in turn increase the levels of the lakes by up to 20 centimetres, which it did, and that would mean that we would be waiting until next winter before we have to make the decision. So we have effectively got a 12-month period before we have to make that decision.

Senator HEFFERNAN—We want to get to why we are meeting. You are saying that there is enough water in the system to get the lakes to March.

Mr Harriss—To prevent acidification—not to get back to normal levels.

Senator HANSON-YOUNG—It is already happening.

Senator HEFFERNAN—The acidification is already happening?

Senator HANSON-YOUNG—Yes.

Mr Harriss—On the perimeters of it, yes, but not to the extent where we have been advised it will cause long-term irreversible environmental damage.

Senator HEFFERNAN—If we get to March and it still has not rained, what happens then?

Mr Harriss—That is when you have to look at the options for maintaining those levels. The options being considered come from two places. It could come from freshwater, which comes from upstream, or it could come from sea water, which is through the barrages.

Senator HEFFERNAN—We have to think about the future against the background of the science of the future. If it does not rain—and I hope it absolutely pours—and we get to next March and you take the fresh water option, where does that water come from?

Mr Harriss—It is water that would have had to have come into the system and had either been allocated for use this year, in which case the mechanism that we would prefer would be purchase, or it would be water that we had reserved to meet our conveyance losses or critical human needs in 2009-10. Or if it was over and above that I think we would probably all be reasonably happy that we could meet all of those commitments anyway.

Senator HEFFERNAN—What sort of a sovereign risk are we talking about by playing around with the idea of putting freshwater into the lakes after next March if they are dry? Paint a picture for the committee.

Mr Harriss—The scenario depends on how much water has come into the system between now and next March.

Senator HEFFERNAN—Just say it is a repeat of this year.

Mr Harriss—If it is a repeat of this year we will be setting aside water to meet our critical human needs and the water required to deliver that in 2009-10 and that would also include looking at how much water has come into the Snowy system and how much they are then required to put into the Murray-Murrumbidgee system.

Senator HEFFERNAN—I will take this a step further. How long can we sustain the present system without decent rain? Do we have two years left in the system? 12 months?

Mr Harriss—If we have a repeat of what we have had in the last year, we will scratch our way through and provide critical human needs. We will provide the conveyance water to deliver that and we will have very limited water available for our higher security users. General-security users, which are more opportunistic in New South Wales, probably will not have any more water, just as in the Lachlan River they have only had water in one year out of the last six. We would be looking at a whole lot of changes to the social and economic environment and communities in the Murray and Murrumbidgee valleys.

Senator HEFFERNAN—Is that starting to approach doomsday stuff?

Mr Harriss—No, I think we are starting to see a lot of industries adjust. One thing we wrote in our submission is that the general-security entitlements in New South Wales are opportunistic. They would typically be used on annual crops, cereal crops or pasture grass. That is why in the last year we have had the lowest rice crop in New South Wales since 1929.

Senator HEFFERNAN—Which is easy to say, but hard to explain to the bank I have to say.

Mr Harriss—I can understand that. In fact, the only rice that was grown last year was a bit on carry over water and the rest on groundwater. Because we are not allowed to import unprocessed rice, you have a lot of difficulty getting Australian grown rice in your supermarkets. However, New South Wales is reasonably well placed because most of our permanent plantings are based on high-security entitlements—as we have pointed out, already having 50 per cent allocation in the Murray and 75 per cent in the Murrumbidgee it is relatively easy to get to. Unfortunately, it is the broader, higher use, less reliability industries like rice, cotton—

Senator HEFFERNAN—Just to paint the picture for the future: if a decline is forecast—say, we lose 3,500 gigalitres out of the Murray-Darling Basin over the next few years—what impact would Goulburn sending water to Melbourne have? Would it have any real impact? Are we worrying about nothing?

Mr Harriss—I will leave that to my Victorian colleagues to explain. They are saying that they are going to get that water that was going to go to Melbourne from the Goulburn from transmission losses within the Goulburn-Murray system.

Senator SIEWERT—Which actually go back to the river.

Senator HEFFERNAN—If we lose 3,500 gigalitres, which is the bottom of the equation, out of the system and we save that water, can we afford to send it to Melbourne? Should we put the saved water back into the system?

Mr Harriss—That is a policy decision. It is really up to governments to decide rather than bureaucrats.

Senator HEFFERNAN—But that is the question, isn't it?

Mr Harriss—If we are looking at climate change and a severe reduction in the run-off and the volume of water available on average in the system then there will be some substantial changes to industries and to the environment in the Murray-Darling Basin. The decisions about what the priorities are are really for governments.

Senator HEFFERNAN—I have said for five years that there will be a reconfiguration of the whole arrangement. In the terminal rivers, what are you—because you are the man—going to do about the banks in the Macquarie Marshes?

Mr Harriss—We undertook a compliance action where we identified all of the block banks and the levies in the Macquarie Marshes. The vast majority of those were licensed. We have gone back and identified whether they were being operated consistent with their licence conditions. Where they have not been approved, we are going to ask for their removal. Where they have not been operated according to their conditions, we are going to seek that they be operated continually according to the conditions. At the same time, we are having a review of the impacts of those block banks. Some of them are having beneficial impacts by diverting the water to areas of the marshes which otherwise would not get water. So we are undertaking hydrological studies to work out the benefits or disbenefits of each of those banks before we act.

Senator HEFFERNAN—Just slipping up the Darling for a minute: are you surprised at the decision to buy Toorale? Do you think that is efficient? You are the water man.

Mr Harriss—The benefits of any purchase depend on what you are going to get locally.

Senator HEFFERNAN—Were you surprised by the decision?

Mr Harriss—No, I certainly was not surprised by the purchase of Toorale.

Senator HEFFERNAN—Do you think it was a good idea? Tell the truth. We will not sack you.

Mr Harriss—It is going to potentially provide immediate benefits to the in channel requirements of the Darling River. Depending on the flow regimes, it can provide additional water which will get down to Menindee Lakes.

Senator HEFFERNAN—Perfect bureaucrat!

CHAIR—What is your view of the health of the Lachlan River?

Mr Harriss—The Lachlan River is probably one which has suffered more degradation over the last few years as a consequence of drought than any other river system in New South Wales. The Lachlan has had one allocation for its general-security users in the last six years whereas, by

comparison, the Murray has had a general-security zero allocation in only the last two years and it is likely we will get a general-security allocation of sorts this year.

CHAIR—Is Warren on the Lachlan River?

Mr Harriss—Warren is on the Macquarie.

CHAIR—Warren is on the Macquarie? Sorry, I thought it was on the Lachlan. What is your view on the Macquarie?

Mr Harriss—The upstream part of the Macquarie is suffering from drought as well. It is just like any terminal river system in New South Wales. I am using the term ‘terminal’ meaning that it ends there, not that it is dying. But we have not had sufficient flows to get down to the wetland systems which are typically on the end of those systems. Some of those systems I noted in the opening statement, like Lowbidgee at the bottom of end of the Murrumbidgee. The Great Cumbung Swamp at the bottom of the end of the Lachlan has just not had any water in the last few years either. The Macquarie Marshes at the bottom reaches of the Macquarie Valley, the Gwydir Wetlands on the Gwydir—all of those wetlands are suffering as a consequence of the drought over the last few years.

CHAIR—Right. A subcommittee of this committee was on the Macquarie at Warren on Friday. We went out for a field inspection. We had a barbecue lunch on the Macquarie. The hospitality of the people out there is second to none, make no mistake about that, and they told us that their part of the river was very healthy.

Mr Harriss—Some parts of the systems are very healthy. I think that sometimes we forget that the rivers and creeks in the Murray-Darling Basin are ephemeral and, rightly, they have naturally dried out or been flooded for millennia. One of the issues we have is that at the turn of the last century many of those systems were completely filled to secure water supply, and that has had an impact such as keeping air away from sediment so that when they are finally exposed after 70 years you get the activation of acid soils.

Senator SIEWERT—On the question that Senator Heffernan asked about the banks, licensed and unlicensed. Could you take on notice—and I do not expect you to do in particular properties, as much as I would like to know—how many properties were being operated without a licence?

Mr Harriss—We are still in the middle of that operation at the present stage, so I would not be able to provide a complete report to you at this stage.

Senator SIEWERT—Is it possible to provide us with an interim report? I am very keen to know how many were licensed and how many have been operating not according to the operation.

Mr Harriss—Of the small subgroup that I was advised of the other day—I cannot remember the numbers off the top of my head—there was only one unauthorised structure in about 20. I would not be surprised by those numbers at all because a lot of these banks were licensed 50 to 100 years ago. It is like the banks or Toorale; they have been around there for a hundred years.

Senator SIEWERT—I understood you to say you are doing some hydrological assessments. Where they are found to be operating—and I appreciate you said some are in a good location—in an inappropriate location, particularly the older ones, is the plan to get them to be removed?

Mr Harriss—There is potential to make adjustments so that they can provide better environmental benefits but we would not prime facie ask to be removed them without compensation, and we do not have provision for compensation. It is going to have a very big consequence on what is a legitimate farming enterprise.

Senator SIEWERT—That is the key point, isn't it. The IGA—I think you were in the room when I asked the Commonwealth department about the IGA's progress. Could you update us on progress of New South Wales, where it is at?

Mr Harriss—The IGA has been agreed, but where we are at is trying to move the enabling legislation through the parliament. We are hoping to do that to enable that legislation to come into effect before 1 November. It is a very tight time frame but we are hoping to do it.

Senator SIEWERT—You think you are going to meet that 1 November deadline?

Mr Harriss—I think that words used to the IGA are 'to make our best endeavours', but we are certainly trying to get it through by 1 November.

Senator WORTLEY—If across the southern basin the government were to purchase temporary water using the budget for permanent water purchase, what do you think would be the reaction from the irrigators in the western Murray who may be relying on permanent water?

Mr Harriss—Whilst the allocations are very low and there is insufficient water to maintain available allocations on permanent plantings, I think they would not be comfortable with that. They would see it as having another player competing in the market. If we got to a stage where there was sufficient water available for permanent plants and there was no likelihood of losing crops then, I think overall, irrigators have said that they have always welcomed the Commonwealth playing in the same markets that they are playing in. I might say that with the water available in the New South Wales Murray irrigation with their carryover and with a 50 per cent allocation we probably have enough water in the New South Wales Murray Valley to ensure a decent production let alone the survival of all of our permanent planting this year.

Senator WORTLEY—On that last bit, you have got enough water—

Mr Harriss—We have enough water available through carryover and through allocation to high-security entitlements already in the Murray Valley to ensure a productive crop this year in excess of just maintaining the life of the plants. As I said before, we have a 10 to 15 per cent high-security entitlement which includes most of our permanent plantings, we have 50 per cent of their entitlement and there was 160 gigalitres carried over. That is more than our normal high-security entitlements in the domain already. Notwithstanding that, we do not have enough water to meet all of our stock and domestic requirements in the valley and we certainly have not got enough for general security yet. I would also say that, if we did have some small volume ultimately available for general security, then it is likely that that water would be put on the market rather than to plant a crop.

Senator HEFFERNAN—This time last year you had a contingency on the Lachlan to cut the river off below Condobolin. How is the Lachlan travelling in terms of sustainability for stock and domestic water? Is it in a better shape than last year? It has about 11 per cent now in the dam, hasn't it?

Mr Harriss—Off the top of my head I cannot tell you if it is better than it was last year. We still do not have any general-security allocation on the Lachlan and we are a long way away from it. We have, I think, about 50 per cent town water supply and domestic allocations so we are not running on empty.

Senator HEFFERNAN—It would be interesting for the committee if they would listen to hear this that on the Lachlan there was a contingency to actually cease flow in the bottom half of the river last year.

Mr Harriss—We have contingencies in all of our valleys. In many instances we have not had to implement them. What we have done in New South Wales is to establish user groups in each valley to advise the department that, if they do not have enough water to meet all of their needs, then how best to distribute it to maintain the environment.

Senator HEFFERNAN—Can you tell me what the contingency was last year on the Lachlan?

Mr Harriss—No, I cannot tell you off the top of my head.

Senator HEFFERNAN—I can.

Mr Harriss—You probably can, but I was not chairing that committee.

Senator HEFFERNAN—If you were the king of the castle and you had the pocketful of money to buy back water and to return water to the system for the lower end of the Murray-Darling, where would you buy the water from? What areas would you target and what wouldn't you target?

Mr Harriss—For the lower reaches, if you were buying water, you would target the Murrumbidgee, the Goulburn and the Murray. If you were buying water to meet the environmental outcomes in the Macquarie you would target the Macquarie River.

Senator HEFFERNAN—We hear a lot about the Coorong.

Mr Harriss—In which case you would target the rivers which are normally hydraulically connected where you can deliver water.

Senator HEFFERNAN—Do you think it is a bit quaint that in the middle of this crisis the government would shell out \$24 million for a property that is probably worth \$17 million to return no water to the system?

Mr Harriss—As I said before, because the flows are so low in the Darling River, you are not going to get an immediate benefit to the Lower Lakes by purchasing water.

Senator HEFFERNAN—You certainly are not.

CHAIR—I am sure it will do some good to the Darling.

Mr Harriss—It will provide local benefits. As I said before, if you want to get local outcomes or regional outcomes in the Macquarie, you would target the Macquarie.

Senator HEFFERNAN—But there is bugger-all water in the system and there bugger-all water at Toorale. The photo we saw in the paper is actually just the lagoon for the homestead supply and everyone thinks that is the storage. How much water is in the billabong where they store it?

CHAIR—That is the last question, Mr Harriss.

Mr Harriss—From memory, I think they said there was about 20,000 megalitres.

Senator HEFFERNAN—It only holds 13½ thousand megs.

Mr Harriss—Collectively, whether it is 20,000 megs or 13½ thousand megalitres, given the state of the river, you are not going to provide anything but local impact.

Senator HEFFERNAN—You have allegedly provided advice—

CHAIR—Senator Heffernan, you ask a question then you yell over the top of the witnesses—

Senator HEFFERNAN—The storage holds between 13 and 14 thousand megs. How much is in the storage that is going to return to the system?

Mr Harriss—What would return to the system is how it is delivered back to the system.

Senator HEFFERNAN—Yes but how much—

CHAIR—Senator Heffernan, you have asked a question and Mr Harriss will answer.

Senator HEFFERNAN—I just want to ask: how much is in the storage? We have bought the place, walk-in walk-out, with the water and some plant and without the stock and crop. How much water was in the system on the day of purchase of the property?

Mr Harriss—My understanding was that it was up to 20,000 megalitres. I will stand corrected but that is what—

Senator HEFFERNAN—That is rubbish.

CHAIR—Thank you very much, Mr Harriss. That concludes today's hearings. The committee now stands adjourned. Thank you to all.

Committee adjourned at 7.00 pm