

Senate Rural and Regional Affairs and Transport References Committee

Questions on Notice – Thursday, 23 August 2012 CANBERRA, ACT

Inquiry into management of the Murray-Darling Basin

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**SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT
REFERENCES COMMITTEE**

Inquiry into the management of the Murray Darling Basin

Public Hearing Thursday 23 August 2012

Questions Taken on Notice – Wakool Shire Council

1. HANSARD, PG 8

Senator EDWARDS: In April, you had the Murray-Darling Basin people come to see you. You had a public meeting and you gave them notice of questions. I see in your discussion points here that you are not all that comfortable that they have been answered. Have you since put those questions—which you have attached for us at annexure A; I assume that is the letter to them—formally, and have you had a response?

Mr Graham: I will answer that in two ways. First of all, the questions were put formally to the Murray-Darling Basin Authority, as I understand it. I cannot answer whether the response has come through to the executive officer as yet.

...

Senator EDWARDS: If that has not been done, are you going to put all those questions on notice and ask for a response? I would be interested to know whether you get a response.

Mr Graham: I would be happy to if they have not been. I will put it that way.

Senator EDWARDS: If you already have a response, would you mind providing this committee with it.

Mr Graham: I will contact the executive officer of RAMROC and provide to you.

Senator EDWARDS: Do you know the letter I am referring to?

Mr Graham: I do.

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ANSWER

24 August 2012

Senator Edwards referred to the tabled a copy of the submission made by the Riverina and Murray Regional Organisation of Councils (RAMROC) to the proposed Murray Darling Basin Plan dated 16th April 2012 and, in particular, the reference to a meeting in Hay on 4th April 2012 and the list of specific questions, as had been requested by the MBDA (3rd paragraph on p6 of the RAMROC submission). Senator Edwards asked whether a response had been received from the Murray Darling Basin Authority.

Today I [Mr Graham, General Manager, Wakool Shire Council] consulted with Mr Ray Stubbs, Executive Officer of RAMROC, who advised that no response has been received from the Murray Darling Basin Authority.

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1. HANSARD, PG 14

CHAIR: How do you include floodwater licensing in the cap?

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Dr McLeod: I might ask you to clarify your question, Senator. When you say 'floodwater'—

CHAIR: This is a combination of floodwater and supplementary water with a gross of 300 gigs. How do you include this water in the cap?

Dr McLeod: The operation of the cap for some years has assumed 300 gigalitres of water is diverted into the Lowbidgee system. It is an estimate based on what goes out of the channel at Maude Weir and the two channels at Redbank Weir.

CHAIR: Can you provide the paperwork that backs that up?

Dr McLeod: We have the information on our website in terms of that.

CHAIR: You can provide it in written form to the committee.

Dr McLeod: Okay.

2. HANSARD, PG 14

Senator XENOPHON: Mr James, you said there would be a technical assessment. I am trying to establish the robustness of any assessment of looking behind any sign-off by the New South Wales government in relation to this particular buyback. If it is on your website, please direct me to the relevant place. What is involved in a technical assessment? What is the nitty-gritty? I am happy for you to take that on notice because I do not want to get bogged down in a technical issue. That information would be helpful to me and I hope to other members of the committee to get an idea of how robust an assessment would be of a buyback proposal such as this which has been quite controversial and has raised a lot of concern in my home state.

Dr McLeod: We will take that on notice.

3. HANSARD, PG 16-17

CHAIR: But you would recognise that if you traded all the water up the river, which you could do, you have a problem with the fish and their legs down the river? As you say, the amount of the water between gross and net delivered, say, to an irrigator on the other side of Balranald—the amount of water for him to get his 500 megs—is a lot different to the bloke at Wagga, correct?

Dr McLeod: Yes.

CHAIR: So there is a hell of a lot of difference in the net and the gross there. But surely you have modelled the net and the gross and what would happen if the Nimmie-Caira water comes up? What is the net and the gross of this water?

Dr McLeod: For the purposes of establishing the baseline diversion limit we assumed, as Mr James said, that half of the 300-odd GLs that goes into that system is used for consumptive purposes, and half is already going to the environment. Obviously, that is an estimate—

CHAIR: That means that half of it is floodwater?

Dr McLeod: No, not necessarily floodwater. There are actually parts of the—

CHAIR: But you said that supplementary water can be shepherded down the river.

Dr McLeod: I am not sure what you mean by 'shepherding'. It is supplementary water—

CHAIR: I am familiar with that part of the thing. At a certain height it will spill.

Dr McLeod: Into the system, yes.

CHAIR: So are you saying that of the 300 gigs, half of it is naturally spilling water?

Dr McLeod: No, I am saying that we have assumed that half the water that is diverted into the Lowbidgee system is used for consumptive purposes and half of irrigation—

CHAIR: But how much of it is supplementary and how much of it is flow?

Dr McLeod: We would have to take that on notice.

4. HANSARD, PG 20

CHAIR: Going back to net and gross and you having to make a call on the Nimmie-Caira you have set up, if you are talking about 300 gigs peak, 170-odd average, is it net water or gross water?

Dr McLeod: I would have to take that on notice.

5. HANSARD, PG 21-22

CHAIR: ... Are you familiar with the water that was bought at Tandou?

...

CHAIR: ... In giving advice on the buy-back, do you have an idea of the streams you are taking out of it? Do you model the average median flow? The mid shot of the Murrumbidgee is 230—the mean average variation. Do you take that into account? Some streams are more reliable than others.

Dr McLeod: The short answer to your question is yes. We do model over a 140-year period, looking at what would happen—

CHAIR: As a guide, could you tell me the most consistent, the most inconsistent, the outer limits of your modelling? Was it 170 per cent? It is not in the buy-back, but the Warrego is 835 per cent.

...

Dr McLeod: We have that information, but I do not have it with me.

...

CHAIR: Could you provide that to us? I would be interested to see it. I know the figures; I just want to know if you know the figures.

Dr McLeod: We have that information. You are after the variability between the wettest year and the driest year at particular locations?

CHAIR: Yes. If it is 2,700 gigs, I am interested in the gross and the net—the hidden amount of water which is the gross, because you are talking net...

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CHAIR: 500 megs at the bottom of the Romani scheme at Hay is a lot different to 500 megs at the top of the Romani scheme at Hay. Do you know the Romani scheme?

Dr McLeod: I do not know the Romani scheme.

CHAIR: ... Could you show us the modelling, including the make-up of the water, the variability of the stream system and the gross and the net?

Dr McLeod: We do have detailed reports available.

CHAIR: But could we see them in paper form?

Dr McLeod: We can provide that as part of the answer on notice.

6. HANSARD, PG 22-23

Senator XENOPHON: Would it be possible to ask whether there has been an assessment by the authority as to the impact of the Toorale purchase in terms of—

...

Senator XENOPHON: I am trying to assist. Senator Heffernan, the chair, has raised the issues about the Toorale purchase. There was a lot of controversy about it at the time. Has there been any follow-up assessment of that in terms of its impact on the environment and the issue of whether it triggered any upstream sleeper licences? Have there been any concertina effects of that purchase?

Senator EDWARDS: Any unintended consequences.

Senator XENOPHON: And, very helpfully, as Senator Edwards has pointed out, the unintended consequences?

Dr McLeod: There are two issues there. One is that our modelling in the Darling and lower Warrego has been about underpinning our proposals in the Basin Plan. We have included in the Basin Plan estimates of the water recovered to date, which includes water that was recovered through the Toorale purchase. That is how we have been involved at that level. There is other work going on, which is working between the Commonwealth and the state of New South Wales. That is associated with the shepherding of the water through that system, which presents particular challenges.

...

Senator XENOPHON: The Toorale purchase in terms of the impact it has had.

...

Senator XENOPHON: On notice. Is that something that is publically available—the concerns that have been raised by Senators Heffernan and Edwards?

...

Senator XENOPHON: ... With this document, would it be possible for the authority to provide details of the environmental and other impacts of the Toorale purchase in terms of any work that the authority has done in respect of that purchase? And I am happy for it to be on notice.

Mr James: We can do it in respect of any work that the authority has done. I guess all I am saying is that I do not think there is much work that we have done.

7. HANSARD, PG 35-36

CHAIR: ... This is a question that Senator Xenophon asked me to ask you: 'It is my understanding that, in certain systems in the New South Wales Murray and Murrumbidgee, reporting for divergence against the Murray-Darling Basin cap is done on a net basis rather than on gross—that is, the actual volumes reported are the total amount diverted into the irrigation channel, less amounts that return to the river through drains—and, I suppose, leakage. 'I understand that this practice will be rolled over into the reporting diversions against SDLs when they replace the cap. Is this policy of reporting net rather than gross consistent with the cap agreement and, if not applied across the entire basin, will a number of upstream irrigators be getting a better deal?' Would you like to take a question on notice?

Mr Slatyer: Yes. It would be on notice to the authority, which administers the cap arrangements.

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Dr McLeod: I might ask you to clarify your question, Senator. When you say 'floodwater'—

CHAIR: This is a combination of floodwater and supplementary water with a gross of 300 gigs. How do you include this water in the cap?

Dr McLeod: The operation of the cap for some years has assumed 300 gigalitres of water is diverted into the Lowbidgee system. It is an estimate based on what goes out of the channel at Maude Weir and the two channels at Redbank Weir.

CHAIR: Can you provide the paperwork that backs that up?

Dr McLeod: We have the information on our website in terms of that.

CHAIR: You can provide it in written form to the committee.

Dr McLeod: Okay.

Answer:

1. In the report titled 'Comparison of watercourse diversion estimates in the draft Basin Plan with other published estimates', Version 2, November 2011 (available at http://www.mdba.gov.au/files/bp-kid/1584-Comparison-of-BP-diversions-with-published-numbers_Nov11-new.pdf), the Murray-Darling Basin Authority (the Authority) notes in table 12 that the long term average diversions into the Lowbidgee Flood Control and Irrigation District for irrigation is estimated to be 149.5 GL/yr and that this is 50% of the total diversions into this district. Therefore the Authority estimates that the total diversion into this district for any purpose is 299 GL/yr.
2. This estimated total long-term average diversion of 299 GL/yr into the Lowbidgee Flood Control and Irrigation District includes only that diversion associated with water access consistent with the proposed Lowbidgee Supplementary Water Access Entitlement and generally does not include overbank flows during significant flooding events.
3. The Lowbidgee Flood Control and Irrigation District includes the diversions from the Maude Weir into the Nimmie-Caria system, as well as the diversions from the Redbank

Weir into both the Redbank North and Redbank South systems. All diversions into this district associated with irrigation are managed under the Murrumbidgee Cap, and are therefore reported and audited annually as part of the annual Cap management.

2. HANSARD, PG 14

Senator XENOPHON: Mr James, you said there would be a technical assessment. I am trying to establish the robustness of any assessment of looking behind any sign-off by the New South Wales government in relation to this particular buyback. If it is on your website, please direct me to the relevant place. What is involved in a technical assessment? What is the nitty-gritty? I am happy for you to take that on notice because I do not want to get bogged down in a technical issue. That information would be helpful to me and I hope to other members of the committee to get an idea of how robust an assessment would be of a buyback proposal such as this which has been quite controversial and has raised a lot of concern in my home state.

Dr McLeod: We will take that on notice.

Answer:

1. The Department of Sustainability Environment Water Population and Communities (SEWPaC) is the agency primarily responsible for assessment of the Business Case for the Nimmie-Caira System Enhanced Environmental Water Delivery Project, as such it is for this department to provide information about the assessment of this project.
2. In support of the assessment being undertaken by SEWPaC, the department has asked the Authority to comment on specific aspects of the proposed Nimmie-Caira project, in particular with regard to;
 - a. Environmental watering requirements particularly in relation to the work undertaken to determine the Environmentally Sustainable Level of Take for the Basin Plan; and,
 - b. Details of the proposed Lowbidgee Supplementary Water Access Entitlement particularly in relation to the determination of the Baseline Diversion Limit for the Basin Plan.

3. HANSARD, PG 16-17

CHAIR: But you would recognise that if you traded all the water up the river, which you could do, you have a problem with the fish and their legs down the river? As you say, the amount of the water between gross and net delivered, say, to an irrigator on the other side of Balranald—the amount of water for him to get his 500 megs—is a lot different to the bloke at Wagga, correct?

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CHAIR: But how much of it is supplementary and how much of it is flow?

Dr McLeod: We would have to take that on notice.

Answer:

1. The Authority estimates that the total net diversion into the Lowbidgee Flood Control and Irrigation District for any purpose is 299 GL/yr. This estimate of diversion includes only those diversions that are delivered into this system in a controlled manner, flows that enter this district in an uncontrolled manner associated with significant overbank flooding are not included in the estimate of diversions.
2. This estimated total long term average diversion into the Lowbidgee Flood Control and Irrigation District of 299 GL/yr relates to the net diversion into the District. The NSW hydrological model of the Murrumbidgee used by the Authority indicates there is some return flow from this district back to the Murrumbidgee River below Redbank Weir. This return flow is estimated at around 10% of the total diversion and is therefore deducted from the total gross diversions from the Maude and Redbank Weirs to determine the net diversion.
3. This estimated total long-term average diversion of 299 GL/yr into the Lowbidgee Flood Control and Irrigation District includes only that diversion associated with the proposed Lowbidgee Supplementary Water Access Entitlement.
4. The Lowbidgee Flood Control and Irrigation District includes the diversions from the Maude Weir into the Nimmie-Caria system, as well as the diversions from the Redbank Weir into both the Redbank North and Redbank South systems. All diversions into this district associated with irrigation are managed under the Murrumbidgee Cap, and are therefore reported and audited annually as part of the annual Cap management.

CHAIR: Going back to net and gross and you having to make a call on the Nimmie-Caira you have set up, if you are talking about 300 gigs peak, 170-odd average, is it net water or gross water?

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Answer:

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2. The Authority understands that the NSW Office of Water estimate that the long-term average diversion from Maude Weir into the Nimmie-Caira system is 173 GL/yr. The other two diversions that sum to the total Lowbidgee Flood Control and Irrigation District diversion estimated by the Authority are those into Redbank North and Redbank South from the Redbank Weir.
3. The Authorities estimated total long term average diversion into the Lowbidgee Flood Control and Irrigation District (299 GL/yr) is estimated as a net diversion with estimated return flows deducted.
4. The Authority is continuing to provide advice to SEWPaC as they undertake their assessment of the proposed Nimmie-Caira project, and is yet to consider whether the estimate of 173 GL/yr is presented as a net or gross diversion estimate.

5. HANSARD, PG 21-22

CHAIR: ... Are you familiar with the water that was bought at Tandou?

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CHAIR: ... In giving advice on the buy-back, do you have an idea of the streams you are taking out of it? Do you model the average median flow? The mid shot of the Murrumbidgee is 230—the mean average variation. Do you take that into account? Some streams are more reliable than others.

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Dr McLeod: I do not know the Romani scheme.

CHAIR: ... Could you show us the modelling, including the make-up of the water, the variability of the stream system and the gross and the net?

Dr McLeod: We do have detailed reports available.

CHAIR: But could we see them in paper form?

Dr McLeod: We can provide that as part of the answer on notice.

Answer:

1. The Authority has done extensive hydrologic modelling over a 114 year historical climate sequence covering the period 1895 to 2009. This period includes significant variability in water availability including major floods and extended droughts.
2. The modelling work of the Authority has been documented in a range of reports including:
 - a. Comparison of watercourse diversion estimates in the draft Basin Plan with other published estimates', Version 2, November 2011 (available at http://www.mdba.gov.au/files/bp-kid/1584-Comparison-of-BP-diversions-with-published-numbers_Nov11-new.pdf)
 - b. Water resource assessments for without-development and baseline conditions - Supporting information for the preparation of draft Basin Plan. Version 2, November 2011 (available at <http://www.mdba.gov.au/files/bp-kid/1557-Water-Balance-in-MDB-v2.pdf>)
 - c. Hydrologic modelling to inform the draft Basin Plan - methods and results, MDBA publication no: 17/12, February 2012 (available at <http://www.mdba.gov.au/draft-basin-plan/science-draft-basin-plan>).
3. These reports incorporate considerations of variability in water availability. Further, the actual modelling data is available via the Authority's web site (see <http://www.mdba.gov.au/bpkid/>)
4. The altered draft Basin Pan (August 2012) specifies an amount of 2,750 GL/yr as being required to be recovered in order to provide for a Sustainable Diversion Limit on surface water use in the Murray-Darling Basin. This is a long term average volume and the

actual additional amount of water available for the environment would vary between years depending on climatic conditions and available water in the system.

5. In the modelling work done by the Authority, the variation in environmental water availability between years is influenced by modelling assumptions which include the nature and location of water recovery and the variability in water availability over the historic climate sequence. In the context of such assumptions, modelling results indicate that, in providing the long term average amount of water recovery to meet the requirements of the Basin Plan, the annual amount of water available could vary from around 300 to around 3,800 GL/yr.

6. HANSARD, PG 22-23

Senator XENOPHON: Would it be possible to ask whether there has been an assessment by the authority as to the impact of the Toorale purchase in terms of—

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Senator XENOPHON: I am trying to assist. Senator Heffernan, the chair, has raised the issues about the Toorale purchase. There was a lot of controversy about it at the time. Has there been any follow-up assessment of that in terms of its impact on the environment and the issue of whether it triggered any upstream sleeper licences? Have there been any concertina effects of that purchase?

Senator EDWARDS: Any unintended consequences.

Senator XENOPHON: And, very helpfully, as Senator Edwards has pointed out, the unintended consequences?

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Senator XENOPHON: ... With this document, would it be possible for the authority to provide details of the environmental and other impacts of the Toorale purchase in terms of any work that the authority has done in respect of that purchase? And I am happy for it to be on notice.

Mr James: We can do it in respect of any work that the authority has done. I guess all I am saying is that I do not think there is much work that we have done.

Answer:

1. You have requested the Authority provide details of work that we have undertaken on environmental and other impacts of the Toorale purchase. The Australian Government contribution to the Toorale purchase was announced on 10 September 2008, two days after the initial commencement of the operation of the Authority. Accordingly, the Authority did not contribute to analysis to inform the purchase.
2. For the Basin Plan, the Toorale purchase was incorporated in the following way. The Basin Plan baseline scenario adopted as a starting point against which Basin Plan SDLs were determined did not include any water recovered under the Commonwealth's Water for the Future program. This includes irrigation water entitlements recovered for the Commonwealth for environmental use as part of the Toorale purchase by the NSW Government. The contribution made by this recovery has been included in estimates of water recovered to date in the Basin Plan that contributes to 'bridging the gap' between baseline diversion limits and sustainable diversion limits. The water recovery associated with 'bridging the gap' is available at: <http://www.mdba.gov.au/draft-basin-plan/supporting-documents/water-recovery>
3. As well as recognising the contribution from water recovered by the Toorale purchase, the Authority has provided advice to SEWPaC on the information required to determine further possible contributions relating to water infrastructure modification on Toorale being investigated by SEWPaC in conjunction with the NSW Office of Environment.
4. The Authority understands that SEWPaC and NSW Office of Environment and Heritage are continuing investigations on the water infrastructure modification proposals.

7. HANSARD, PG 35-36

CHAIR: ... This is a question that Senator Xenophon asked me to ask you: 'It is my understanding that, in certain systems in the New South Wales Murray and Murrumbidgee, reporting for divergence against the Murray-Darling Basin cap is done on a net basis rather than on gross—that is, the actual volumes reported are the total amount diverted into the irrigation channel, less amounts that return to the river through drains—and, I suppose, leakage. 'I understand that this practice will be rolled over into the reporting diversions against SDLs when they replace the cap. Is this policy of reporting net rather than gross consistent with the cap agreement and, if not applied across the entire basin, will a number of upstream irrigators be getting a better deal?' Would you like to take a question on notice?

Mr Slatyer: Yes. It would be on notice to the authority, which administers the cap arrangements.

Answer:

The Cap on diversions is based where possible on net diversions. However in some cases it is not practical to measure the return flows and in particular it is not practical to measure returns via groundwater. Diversion for the purpose of the Cap reporting for every designated

valley is calculated according to the formula entered for that valley into the Diversion Formula Register (DFR) maintained under clause 4 of Schedule E to the Murray-Darling Basin Agreement. The current version of DFR was approved by the Authority in November 2011. The reporting, where possible, of net rather than gross diversions is consistent with the agreed Cap arrangements. This approach is intended to be continued for the purpose of reporting diversions against Sustainable Diversion Limits under the draft Basin Plan.

**SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT
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Public Hearing Thursday 23 August 2012

**Questions Taken on Notice – Department of Sustainability, Environment,
Water, Population and Communities**

1. HANSARD, PG 24-28

Mr Parker: Senator, you asked a question before which went to the issue of prioritisation of infrastructure spending over the purchase. We can give you some figures to that end right now if you like. More broadly, there are a whole range of infrastructure programs which are directed at increasing the efficiency of water use in the basin and bringing about a range of environmental benefits as well. I am happy to run you through all of those. It could take some time.

Senator EDWARDS: ... I guess there is some planning going on for the infrastructure upgrades and the costings of them.

Mr Parker: Yes, that has been going on for a number of years. In the last 18 months or so we have seen quite significant steps forward in the rollout and contracting of that infrastructure.

...

Senator EDWARDS: Are you aware of a submission made by the Water Industry Alliance to the authority?

...

Ms Harwood: The proposal that was actually put to our minister and to the department—which we have agreed to fund, and it is actually underway—is a feasibility study. So it is basically working that up into a full business case, developing a business case to meet the criteria for funding and to assess the feasibility of all aspects of the proposition. So it is taking it from an outline proposal, essentially, to a funding proposition which the South Australian government would then propose and, when that process is complete, seek funding from the Commonwealth for it.

...

Senator XENOPHON: Further to Senator Edwards' line of questioning, how much has actually been spent in South Australia to date in terms of that? I am happy for you to take that on notice.

Ms Harwood: I will take that on notice.

2. HANSARD, PG 28-29

CHAIR: ... Have you got the document from New South Wales on their Lower Murrumbidgee buyback plan?

...

CHAIR: You would be familiar with the set-up there. Currently they pay \$4.10 a hectare for the water. Can you give me an estimate of how per hectare the absorption rate of the water is?

...

Mr Parker: We would have to take the precise question per hectare on notice.

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CHAIR: I think we will have to have you back because, obviously, we want to know that. Four dollars and 10 cents a hectare is about \$1.70 an acre. You don't know the absorption value of the country?

Ms Harwood: No. We would have to take that on notice.

CHAIR: Will you be working that out to calculate it?

Ms Harwood: We will be looking at all aspects of the proposal in terms of the water value.

CHAIR: So at a future date we can have you back and you can take us through the technicalities. When have you got to decide this by and give a tick or cross to the proposal from New South Wales?

Ms Harwood: We do not have a set date.

CHAIR: So we can safely invite you back and you will let us know if we ought to get on with it, because we do not want to miss the bus. Would you let us know when you have those figures?

3. HANSARD, PG 31-32

CHAIR: Do you include in the buyback the Lower Darling?

...

CHAIR: What is the estimated average evaporation at Menindee Lakes at, say, a median shot—half full? Is it a couple of metres a year?

Mr Parker: In terms of height?

CHAIR: Evaporation.

Ms Harwood: From memory it is over 400 gegalitres on average over a year across the whole system in Menindee Lakes, but I would have to confirm.

CHAIR: What is the use upstream? It used to be the lakes evaporated as much as everyone pumped upstream, but that is probably an old figure. Do you know what the evaporation is versus the pumping upstream?

Ms Harwood: The total diversions upstream of Menindee?

CHAIR: Yes.

Ms Harwood: I could take that on notice. I could add it up for you now.

4. HANSARD, PG 35

Ms Harwood: Again, I will just keep saying that, in all of these aspects of the assessment of the water—

CHAIR: You are allowed to.

Ms Harwood: the characteristics of the proposition are what we will be working on in this due diligence assessment.

CHAIR: All right. Can you advise the committee, can I plead with you, to let us have a crack at it before anything gets signed off so that we can analyse what is proposed?

Ms Harwood: That is something I would have to discuss with the minister.

CHAIR: Can you take it to the minister? We just want to make sure we do not get duded. Thank you very much for your attendance and for your patience.

**SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT
REFERENCES COMMITTEE**

Inquiry into the management of the Murray Darling Basin

Public Hearing Thursday 23 August 2012

**Questions Taken on Notice – Department of Sustainability, Environment,
Water, Population and Communities**

1. HANSARD, PG 24-28

Mr Parker: Senator, you asked a question before which went to the issue of prioritisation of infrastructure spending over the purchase. We can give you some figures to that end right now if you like. More broadly, there are a whole range of infrastructure programs which are directed at increasing the efficiency of water use in the basin and bringing about a range of environmental benefits as well. I am happy to run you through all of those. It could take some time.

Senator EDWARDS: ... I guess there is some planning going on for the infrastructure upgrades and the costings of them.

Mr Parker: Yes, that has been going on for a number of years. In the last 18 months or so we have seen quite significant steps forward in the rollout and contracting of that infrastructure.

...

Senator EDWARDS: Are you aware of a submission made by the Water Industry Alliance to the authority?

...

Ms Harwood: The proposal that was actually put to our minister and to the department—which we have agreed to fund, and it is actually underway—is a feasibility study. So it is basically working that up into a full business case, developing a business case to meet the criteria for funding and to assess the feasibility of all aspects of the proposition. So it is taking it from an outline proposal, essentially, to a funding proposition which the South Australian government would then propose and, when that process is complete, seek funding from the Commonwealth for it.

...

Senator XENOPHON: Further to Senator Edwards' line of questioning, how much has actually been spent in South Australia to date in terms of that? I am happy for you to take that on notice.

Ms Harwood: I will take that on notice.

ANSWER: In July 2012, the Australian Government agreed to provide funding of up to \$1.206 million to the South Australian Government to develop a feasibility study and Business Case for the proposed South Australian River Murray Improvements Project. The Commonwealth contribution represents 90 per cent of the expected maximum cost of the study, with the South Australian Government making a 10 per cent contribution.

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ANSWER: The department does not hold specific soil absorption data for the Nimmie-Caira project area, and no soil data was provided in the Business Case.

As part of our due diligence assessment of the Nimmie-Caira proposal, we are obtaining independent valuations of the land and water entitlements being offered.

As water, soil and other landscape characteristics will directly influence the productivity and value of the proposal, these will be investigated as part of the due diligence assessment.

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Ms Harwood: The total diversions upstream of Menindee?

CHAIR: Yes.

Ms Harwood: I could take that on notice. I could add it up for you now.

ANSWER The MDBA advise that the average evaporation from the Menindee Lakes is 406 gigalitres per year.

Total water course diversions for the northern basin are 2,540 gigalitres per year.

Information on this can be found in a MDBA publication entitled 'Water Resource Assessments for Without-development and Baseline Conditions', MDBA Technical Report 2010/20 Version 2, November 2011, specifically Table 26 on page 48.

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Ms Harwood: That is something I would have to discuss with the minister.

CHAIR: Can you take it to the minister? We just want to make sure we do not get duded. Thank you very much for your attendance and for your patience.

** Please note: we understand Senator Heffernan is referring to the outcome of the department's Nimmie-Caira due diligence assessment.

ANSWER: Once the due diligence assessment is completed, the Department will provide a report to the Minister for Sustainability, Environment, Water, Population and Communities on the outcomes of that assessment for the Minister's consideration. At that time the Minister will consider the request from the Committee to have access to the due diligence assessment before any final decision is made on the assessment.