Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 109

Broad Topic: Extraction of water by Coal

Seam Gas industry

Proof Hansard Page and Date 32, 33, 34 (18/10/11)

or Written Question:

Senator Joyce asked:

(Page 32)

Senator JOYCE: So, with the explosion of coal seam gas, you have got a really good handle now on how much water they are going to take?

(Page 33)

Dr MacLeod: There are very active discussions ongoing with state governments, particularly New South Wales and Queensland, to understand the extent of the proposals that are currently in development, and that is one of the issues that we have been exploring with states over recent months. We have put forward proposals for SDLs for those groundwater areas and we have been discussing those with the states as well. We believe that the current thinking of the authority represents a reasonable balance between long-term sustainability—

Senator JOYCE: I do not know what that means—a reasonable balance? So tell me how much water they are going to take out of the aquifer, seeing as we have had this discussion? I just want to know what amount is now thought of as a reasonable balance. In your mind, how much is coal seam gas going to take out of the aquifers?

Dr MacLeod: I do not have the numbers with me to hand. We have put forward proposals for sustainable diversion limits for all of the aquifers that are within part of the area of the authority—bearing in mind that the Great Artesian Basin is not one of the Basin water resources. So we have an authority do not have any—

Senator JOYCE: What about the Condamine alluvium? That is part.

Dr MacLeod: Again, from memory—and I do not have these numbers specifically to hand—I believe that the current proposals that Dr Dickson has indicated have been discussed with stakeholders and state governments indicate that the proposal for the Upper Condamine alluvium is to reduce the extractive limits, in line with the proposals that were being discussed with the Queensland government.

Senator JOYCE: I do not see how you can arrive at a comfortable balance when we do not actually know how much they are taking out.

...

Dr Dickson: Senator, we can provide the information that we have provided to all of the stakeholders that I mentioned before. We can make that available to you now on the basis that it is just our current thinking.

Senator JOYCE: If we could have it now, that would be great.

(Page 34)

Dr Dickson: We might have to get it for you on notice. I do not think we have it available today.

Dr MacLeod: I do not think we have it here right now.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Answer:

Any extraction from a Murray Darling Basin groundwater resource, including coal seam gas, has to be consistent with the Sustainable Diversion Limit (SDL) for the area the water has been extracted from.

The table at <u>Attachment A</u> reflects the Authority's thinking on groundwater SDLs as of October 2011.

Groundwater Sustainable Diversion Limits - Proposed Basin Plan December 2011

SDL Area ID	SDL Area Name	Guide BDL	Guide SDL	Guide % Reduction (BDL-SDL Proposal)	Proposed BDL	Proposed SDL	Volumetric Reduction (CDL-SDL)	% Reduction (BDL-SDL)
CC1	South Australia	<u> </u>	Γ	Ι	0.00	0.40		П
GS1 GS1	Angas Bremer (Quaternary) Angas Bremer (Murray Group Limestone)	6.5	4.0	38.5	0.00 6.57	2.18 6.57		
GS2	Eastern Mount Lofty Ranges	19.3	33.5		34.7	38.5		
GS3	Mallee (Pliocene Sands)	19.5	33.3		0.00	82.8		
GS3	Mallee (Murray Group Limestone)	63.4	63.4		65.7	65.7		
GS3	Mallee (Renmark Group)	00.1	00.1		0.00	2.00		
GS4	Marne Saunders (fractured rock)				2.09	2.09		
GS4	Marne Saunders (Murray Group Limestone including overlying Quaternary	4.7	4.7					
	sediments)	4.7	4.7		2.38	2.38		
GS4	Marne Saunders (Renmark Group)				0.50	0.50		
GS5	Peake–Roby–Sherlock (unconfined limestone)	5 0	<i>5</i> 0		3.41	3.41		ļ
GS5	Peake-Roby-Sherlock (confined strata - Buccleuch formation and Renmark	5.2	5.2		2.58	2.58		
GS6	Group) SA Murray (Groundwater)	1.8	19.0		1.80	127.8		
GS7	SA Murray Salt Interception Schemes	11.1	28.3		11.1	28.6		
007	OA Munay Call Interception Conemes	11.1	20.5		11.1	20.0		
	Victoria							
	Goulburn-Murray: Goulburn-Broken Highlands	9.8	9.8		15.2	35.8		
	Goulburn-Murray: Loddon-Campaspe Highlands	9.4	9.4		13.0	16.8		
	Goulburn-Murray: Murray Highlands	4.4	4.4		5.44	5.44		
	Goulburn-Murray: Ovens Highlands Goulburn-Murray: Ovens-Kiewa Sedimentary Plain	3.2 14.7	3.2 14.7		4.67 28.5	4.67 30.5		
	Goulburn-Murray: Victorian Riverine Sedimentary Plains (deep; Renmark							
GS8f	Group and Calivil Formation)	89.6	127.0		175.0	127.0	48.0	27.4
GS8f	Goulburn-Murray: Victorian Riverine Sedimentary Plains (shallow;	83.3	85.0		244.1	244.1		
	Shepparton Formation)							
	Wimmera-Mallee: West Wimmera (Loxton Parilla Sands)	0.0	12.0		0.00	22.1		
	Wimmera-Mallee: West Wimmera (Murray Group Limestone) Wimmera-Mallee: West Wimmera (Tertiary Confined Sands Aquifer)	1.9 0.8	25.5 4.0		25.5 4.00	25.5 4.00		
	Wimmera-Mallee: West Willimera (Tertary Confined Sands Aquiler) Wimmera-Mallee: Wimmera-Avoca Highlands	0.8	0.2		1.26	3.02		
	Wimmera-Mallee: Wimmera-Mallee Border Zone (Loxton Parilla Sands)	0.0	9.7		0.00	9.37		
GS9c	Wimmera-Mallee: Wimmera-Mallee Border Zone (Murray Group Limestone)	0.0	14.1		14.1	14.1		
GS9c	Wimmera-Mallee: Wimmera-Mallee Border Zone (Tertiary Confined Sands Aquifer)	8.8	1.1		1.10	1.10		
GS9d	Wimmera-Mallee: Wimmera-Mallee Sedimentary Plain	0.6	27.0		24.2	236.2		
	New South Wales	T	1	T		ı		
	Adelaide Fold Belt	3.0	3.3		3.61	5.25		
	Bell Valley Alluvium	2.2	2.2		2.21	2.21		
	Belubula Alluvium	1.9	1.9		2.90	2.90		
GS13	Billabong Creek Alluvium	2.0	6.1		7.50	7.50		
	Castlereagh Alluvium	0.4	0.4		0.63	0.63		
	Collaburragundy-Talbragar Alluvium	3.7	3.7		2.76	2.76		
	Cudgegong Alluvium	1.6	1.6		2.54	2.54		
	Eastern Porous Rock: Macquarie-Castlereagh	5.2	5.2		6.20	13.4		
	Eastern Porous Rock: Namoi-Gwydir Inverell Basalt	10.3	10.3		15.5	15.5		
	Kanmantoo Fold Belt	2.9 8.2	2.9 27.5		4.15 8.91	4.15 28.5		
GS20	Lachlan Fold Belt: Lachlan	23.1	23.1		36.9	123.6		
	Lachian Fold Belt: Lachian Lachian Fold Belt: Macquarie Castlereagh	47.7	47.7		51.2	89.3		
	Lachlan Fold Belt: Marray	5.1	5.1		14.3	31.9		
GS23	Lachlan Fold Belt: Murrumbidgee	30.9	30.9		26.3	133.4		
	Lachlan Fold Belt: Western	1.2	13.0		13.7	230.6		
GS26	Lake George Alluvium	1.1	0.8	31.8	1.30	1.30		
	Liverpool Ranges Basalt	2.7	2.7	57.0	2.16	2.16		
	Lower Darling Alluvium	1.4	1.9		1.78	1.78		
	· · · · · · · · · · · · · · · · · · ·							
GS29	Lower Gwydir Alluvium	32.3	32.3		32.9	32.9		
	Lower Lachlan Alluvium	108.0	64.8	40.0	123.4	117.0		
	Lower Macquarie Alluvium	69.3	41.9	39.5	70.7	70.7		
GS32	Lower Murray Alluvium (Shallow)	40.0	40.0		81.9	81.9		
	II AA AH (D)	83.7	83.7		88.8	88.8		
	Lower Murray Alluvium (Deep)							
GS33	Lower Murrumbidgee Alluvium (shallow)	280.0	280.0		26.9	26.9		
	, , , ,	280.0	280.0 75.0	12.8	26.9 273.6 88.3	26.9 273.6 88.3		

SDL Area ID	SDL Area Name	Guide BDL	Guide SDL	Guide % Reduction (BDL-SDL Proposal)	Proposed BDL	Proposed SDL	Volumetric Reduction (CDL-SDL)	% Reduction (BDL-SDL)
GS35	Manilla Alluvium	1.9	1.9		0.42	0.42		
GS36	Mid-Murrumbidgee Alluvium	44.0	44.0		48.1	48.1		
GS37	NSW Alluvium above the GAB	1.2	29.0		1.28	22.5		
GS38	NSW Border Rivers Alluvium	6.6	6.6		8.39	8.39		
GS39	NSW Border Rivers Tributary Alluvium	0.5	0.5		1.73	1.73		
GS40	NSW Sediments above the GAB	1.0	46.0		0.92	80.0		
GS41	New England Fold Belt: Border Rivers	3.4	3.4		6.31	15.3		
GS42	New England Fold Belt: Gwydir	4.1	4.1		6.45	22.2		
GS43	New England Fold Belt: Namoi	15.6	15.6		18.3	39.4		
GS44	Orange Basalt	6.9	24.0		10.7	10.7		
GS45	Peel Valley Alluvium	9.3	7.3	21.5	9.34	9.34		
G345	Peer valley Alluvium	9.3	7.3	21.5	9.34	9.34		
GS46	Upper Darling Alluvium	2.4	4.8		6.72	7.10		
GS47	Upper Gwydir Alluvium	0.8	0.8		0.72	0.72		
GS48	Upper Lachlan Alluvium	77.1	63.0	18.3	94.1	94.1		
GS49	Upper Macquarie Alluvium	13.7	13.7		18.0	18.0		
GS50	Upper Murray Alluvium	11.0	11.0		14.1	14.1		
GS51	Upper Namoi Alluvium	122.1	95.0	22.2	123.4	123.4		
GS52	Upper Namoi Tributary Alluvium	2.0	2.0		0.37	0.37		
GS53	Warrumbungle Basalt	0.5	0.6		0.55	0.55		
GS54	Western Porous Rock	29.3	71.0		48.7	225.9		
GS55	Young Granite	4.3	4.3		7.09	7.09		
GS70	Gunnedah-Oxley Basin	NA	NA		NA	300.0		
GS71	Oaklands Basin	NA	NA		NA	2.50		
0050	Australian Capital Territory	7.0	4.4	20.0	4.70	7.05		1
GS56	Australian Capital Territory (Groundwater)	7.3	4.4	39.3	1.70	7.25		
	Queensland							
GS57	Condamine Fractured Rock	2.1	2.1		0.81	2.14		
GS58	Queensland Border Rivers Alluvium	13.4	13.4		13.8	13.8		
GS59	Queensland Border Rivers Fractured Rock	6.8	6.8		10.1	11.0		
GS60	Sediments above the Great Artesian Basin: Border Rivers	0.1	42.0		0.04	28.7		
GS61	Sediments above the Great Artesian Basin: Condamine–Balonne	0.3	5.0		0.66	35.6		
GS62	Sediments above the Great Artesian Basin: Moonie	0.5	9.0		0.10	64.9		
GS63	Sediments above the Great Artesian Basin: Warrego–Paroo–Nebine	1.1	25.4		1.21	197.1		
GS64	St George Alluvium: Condamine–Balonne (shallow)	2.5	40.0		0.77	54.6		
GS64	St George Alluvium: Condamine–Balonne (deep)	7.5	12.6		12.6	12.6		
GS65	St George Alluvium: Moonie	0.5	1.7		0.01	1.37		
GS66	St George Alluvium: Warrego–Paroo–Nebine	0.3	6.5		0.12	49.1		
	Upper Condamine Alluvium (Central Condamine Alluvium)	117.1	76.8	34.4	81.4	46.0	35.40	43.5
GS67b	Upper Condamine Alluvium (Tributaries)	\neg			45.5	40.5	5.00	11.0
	Upper Condamine Basalts	76.1	61.1	19.7	79.0	79.0		
GS69	Warrego Alluvium	0.7	26.6		0.70	19.8		

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA **Question No:** 110

Broad Topic: Great Artesian Basin

Proof Hansard Page and Date 42(18/10/11)

or Written Question:

Senator Joyce asked:

Senator JOYCE: Obviously a huge section of the Great Artesian Basin is covered by the Murray-Darling Basin. It is just self-evident that water is going to go into the Great Artesian Basin. We cannot dance around that one, for goodness sake, can we?

Dr Dickson: We are restricted in our purview by what is required in the act. If you want any further information on the Great Artesian Basin—

Senator JOYCE: You are not allowed to talk about the Great Artesian Basin?

Dr Dickson: It is just not within our assessment—

Senator JOYCE: Would you like it to be in your purview?

Dr Dickson: given that the Water Act has excluded it. If you wish to seek more information on the

Great Artesian Basin, we will see what we can find and provide it to you on notice.

Answer:

The Water Act 2007 (Cth) Part 1, Section 4 (page 5) defines Basin Water Resources as:

Basin water resources means all water resources within, or beneath, the Murray-Darling Basin, but does not include:

- (a) water resources within, or beneath, the Murray-Darling Basin that are prescribed by the regulations for the purposes of this paragraph; or
- (b) ground water that forms part of the Great Artesian Basin.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 111

Broad Topic: Consultation with Regional

Communities

Proof Hansard Page and Date 38, 39 (18/10/11)

or Written Question:

Senator Joyce asked:

Senator JOYCE: What would be the process for consultation after the release of the Basin Plan? **Dr Dickson:** The next five months after we release the proposal we will be using a whole range of fora to make stakeholders aware of the information.

Senator JOYCE: So you would go around the country doing that?

Dr Dickson: We will probably be talking very much to the same groups we are already consulting with and make opportunities available to the broader community, depending on the particular way each community would like to be consulted. We have spent quite a lot of time over the last few months talking to communities across the basin to identify how they best want to consulted. Some communities prefer smaller meetings and some want larger. So there is a whole range of different ways that we are trying to meet community needs.

Senator JOYCE: Seeing how they want to be consulted, how do the people of Deniliquin want to be consulted?

Dr Dickson: I will have to take that one on notice, because most recently the chairman was in Deniliquin talking to them about how they would like to be consulted.

Senator JOYCE: How about the people of St George or Goondiwindi? Tell me how they would like to be consulted.

Dr Dickson: Can I take those specific questions on notice? I do not have the details with me. **Senator JOYCE:** What about the people of Mildura? How do they want to be consulted?

CHAIR: Senator Joyce, you are asking the same question, and I expect you will get the same answer.

Answer:

Information on the consultation process will be made progressively available at http://www.mdba.gov.au/have-your-say/updates-and-events.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 112

Broad Topic: Water Efficiency Measures

Proof Hansard Page and Date 39 (18/10/11)

or Written Question:

Senator Xenophon asked:

Senator XENOPHON: I guess the heart of my question goes to issues of equity—that is, if it can be shown that a previous catchment has undertaken water efficiency measures well before the \$5.8 billion was established, to what extent, on an equity basis, is that taken into account? When I raised this with Mr Freeman back on 25 May, as I understand it, the guide at page 214 specified that about 500 gigalitres could be sourced anywhere in the basin in terms of any savings. Could that 500 gigalitres form the basis of an equity dividend, if you like, for those irrigators and for those communities that have done the right thing previously?

Dr Dickson: If you are referring to the savings that need to be required in the downstream component—

Senator XENOPHON: Yes.

Dr Dickson: it is really a matter of where the market is going to be most able to achieve savings there, rather than specifying any particular group. We do not want to constrain the capacity of individuals for that recovery in that way. So I think the answer to your question might be no.

Senator XENOPHON: Sure. I might invite you to take this on notice further.

Dr Dickson: I think that might be a good idea.

Answer:

The Basin Plan, published by the Murray-Darling Basin Authority (the Authority) as a draft for consultation on 28 November 2011, sets out the proposed approach to achieve Sustainable Diversion Limits (SDLs) in terms of:

- a. local-scale reductions are based on the catchment environmental water requirements within an SDL area; and
- b. downstream reductions are based on any remaining environmental water needs for the connected southern or northern parts of the Basin, but are not specifically assigned to come from any particular valley.

This approach reflects the physical reality that the overall needs of the Barwon-Darling and of the Murray can be physically sourced from throughout the connected areas in the relevant parts of the Basin through additional water recovery from infrastructure investments in water efficiencies and through water purchasing.

The actual location of infrastructure investment and water purchases is a matter for relevant Basin jurisdiction governments rather than the Authority.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA **Question No:** 113

Broad Topic: Windsor Report and Release

of the Proposed Basin Plan

Proof Hansard Page and Date 42, 43 (18/10/11)

or Written Question:

Senator Birmingham asked:

Senator BIRMINGHAM: Dr Dickson, congratulations on your appointment and welcome to your first estimates hearing in this role. The MDBA minutes on 19 April 2011 state that the chair, Mr Knowles, reported that the tabling of the House of Representatives committee inquiry report into the impact of the Murray-Darling Basin Plan in regional Australia (the Windsor report) might be delayed, and suggested that if it was delayed the authority could not delay the release of its proposed Basin Plan. That was on the 19 April. At that point, the release of the proposed Basin Plan was publicly expected around July. Why could the release not be delayed in April when it was scheduled in July but can now be delayed until at least mid-November?

Dr Dickson: I was not at the meeting. I will take that on notice and give you a response.

Answer:

The Windsor report was released on 2 June 2011. At that time, the Chair committed to considering the findings and recommendations of the report along with the release of the proposed Basin Plan planned for the middle of the year.

The attached press releases, issued on 3 August 2011 and 11 August 2011, set out the reasons why the Murray-Darling Basin Authority decided that an extra three months was needed to further develop the draft plan before release.

CHAIR'S STATEMENT





3 August 2011

From the Hon. Craig Knowles

Progress on the Proposed Basin Plan

During the past fortnight, I have met and spoken with senior ministers and officials in the Basin Governments as part of the necessary briefings and discussions as we move towards consulting on a draft basin plan.

Following these discussions, and submissions from some states, the Authority has formed a view that there are broader issues that need to be resolved before the draft plan is released.

I want to ensure that these broader issues have time to be worked through and governments have access to the information they need.

Further work by all parties in developing the draft basin plan includes:

- shaping how the plan will be implemented in the period 2012-19 and the mid-point review process
- identifying what needs to be done to address constraints that limit our ability to move water around the Basin effectively.

This will allow time for negotiations to be finalised between the Commonwealth and states concerning infrastructure funding.

It's also important that any points from our latest science review, and state science reviews, be incorporated into the draft plan before it is made publicly available.

I am particularly keen to explore with governments how we can address the Windsor Inquiry recommendation to review "all regulations and agreements in place that inhibit the efficient management of water in the Murray–Darling Basin" (recommendation 1, page xvii).

I would like to thank each of the state and territory ministers for their constructive efforts and their commitment to working together to produce a draft plan that will underpin a healthy working basin.

We will continue to work with the states and territories to get the work done as quickly as possible. We're aiming to finish the work by mid-October and will put out the draft as soon as we can after that. So that this doesn't affect the holiday season, we are allowing a further four weeks for consultation, providing a minimum of 20 weeks for public comment on the plan.

I will also be using this time to keep talking to people in the basin to share ideas and suggestions for the plan and its implementation.

This is too important to rush – it's not about ticking a box – it's about getting it right.

ENDS

CHAIR'S STATEMENT





11 August 2011 From the Hon. Craig Knowles

MDBA and states work together on the draft Basin Plan

The Authority and states are continuing to progress our cooperative effort in developing the Basin Plan.

Since my announcement last week, I have written to the states acknowledging their historic and ongoing commitment and proposed that we agree to a forward program of work that we can all sign on to.

The work will take some extra time, but it will be time well spent.

The States and Territory Governments' roles in this are critical. They have decades of knowledge and they will continue to be partners in the implementation of the plan into the future.

We want to get on with the job and get the draft plan on public exhibition. That's why I've proposed that it'll be 'pens down' in mid-October, to allow a few short weeks to finalise our collective endeavours, get our work to the printers, and have the draft ready for exhibition in November, followed by 20 weeks of consultation.

As is well known, we are moving toward a Plan that will seek balance, respect communities and allow for changes to be made over time - sensibly and with an understanding that the solution is not just about a volume of water being sent down the river, but what you actually do with the water that's available to you.

Getting the best out of every drop is what this is all about. There is no perfect number, and there are lots of solutions that go way beyond buying water. We need to incorporate infrastructure, adopt more effective and efficient rules about water management, build environmental works to manage water smarter and, most of all, we need all of the governments of Australia to work together.

I want to record my appreciation of the states' willingness to join in and work towards finding these solutions.

The rules that govern water have grown like topsy over 100 years since Federation. Tony Windsor says they need to be sorted and made more efficient. I think he's right.

But it won't happen unless the states join in.

If the extra time allows a higher degree of collaboration and joint ownership of a plan for the Murray-Darling Basin it will be well and truly worthwhile.

ENDS

For more information contact the MDBA Media office at media@mdba.gov.au

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Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 114

Topic: Basin Plan – in-catchment

reductions

Proof Hansard Page and Date 44-45 (18/10/11)

or Written Question:

Senator Joyce asked:

Senator JOYCE: You said a second ago that the Goulburn cuts were based on the sustainable take for the Goulburn. Does this mean that you did not take into account the socio-economic circumstances of it?

Dr Dickson: As I said, they were based on the Northern Region Sustainable Water Strategy.

Senator JOYCE: Does that take into account socio-economic circumstances?

Dr Dickson: I will have to take that on notice. It is the basis on which Victoria developed their

strategy. I will take that on notice and provide you advice on Victoria's process.

Answer:

The Northern Region Sustainable Water Strategy of the Victorian Government is a broad ranging strategy, not solely focused on returning water to the environment. It includes actions across a broad range of areas which contribute to better outcomes for water users, communities and the environment. The guiding principles for the Northern Region Sustainable Water Strategy include 'maximising efficiency and seeking multiple benefits', 'Maximising environmental outcomes', and 'Socially responsible decision making'. The development of the strategy has also involved several rounds of public consultation. The Strategy is the result of an 18 month collaborative process involving Government departments, independent experts, key water industry stakeholders, including urban, rural and environmental water users and the broader regional community.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4.1: WRD **Question No:** 115

Topic: Basin Plan – consultation

process post release

Proof Hansard Page and Date 46 (18/10/11)

or Written Question:

Senator Joyce asked:

Senator JOYCE: Will the minister be attending the consultations after the draft plan is released? Senator Conroy: I am not sure the officers would actually know the answer so I will take that on notice.

Answer:

The Minister will endeavour to visit communities and meet with stakeholders throughout the consultation period.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA **Question No:** 116

Topic: Extraction of water by the

Coal Seam Gas industry

Proof Hansard Page and Date 46-47 (18/10/11)

or Written Question:

Senator Joyce asked:

Dr Dickson: As was mentioned before, when we were discussing some of the other aquifers, most of these are exercised through state legislation. So it would be a matter of whether it is legal or not under the state legislation, which I suspect—

Senator JOYCE: Does the Murray-Darling Basin cover the extraction of water by coal seam gas operators and the amounts they extract?

Dr Dickson: I think we covered that question before by saying it covers the extraction of all water that is covered by the resources of the Murray-Darling Basin.

Senator JOYCE: So how much does coal seam gas extract?

Dr Dickson: I do not have the answer to that question.

Senator JOYCE: Can you take it on notice?

Dr Dickson: Yes.

Senator Conroy: To see if there is any information we can provide for you.

Senator JOYCE: Is there anything prohibiting you from getting that information? Do you think that information is accessible—to the extent that mining licences have been granted at the moment?

Dr Dickson: We will explore that and get you the answer.

(Page 47)

Senator JOYCE: Do you think there is something rather strange about the fact that such a substantial extraction of water is not actually within your purview?

Dr Dickson: The extraction of any water within the basin, as described, is covered by the SDLs we are developing for ground water.

Senator JOYCE: You acknowledged, just through the questions I have asked, that there is rather a paucity of information about anything to do with coal seam gas and yet it is one of the largest extractors of water in the northern part of the basin.

Dr Dickson: I will get that information for you, Senator.

Answer:

In relation to coal seam gas (CSG) water extraction volumes, a September 2011 National Water Commission report (Onshore co-produced water: extent and management) has provided the following information regarding extraction from the Murray-Darling Basin: In the New South Wales section of the Murray-Darling Basin water production associated with CSG may range from 1.8 to 36.0 GL/year (depending on the level of development).

The report also stated that in Queensland CSG water extraction from the Surat Basin, part of the Great Artesian Basin, which underlies the Murray-Darling Basin, may range between 126 GL/year and 281 GL/year (depending on the level of development).

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 117

Broad Topic: Review of the Basin Plan in

2015

Proof Hansard Page and Date 52 (18/10/11)

or Written Question:

Senator Birmingham asked:

Senator BIRMINGHAM: I turn to the statement by the chair of the MDBA of 15 September 2011. In that statement the chair talks about there being a further three to four years of analysis and the basin plan then being reviewed in 2015. When did the MDBA make the decision to have this two-stage approach to the basin plan?

Dr Dickson: I think I would have to take the exact date on notice. In fact, I think it was part of a developing discussion over a number of weeks, probably around July-August. We had been discussing for some time with the states the idea of how you would manage the transition period and look at potential changes to the SDLs as new information came to light. As a result of those discussions, for practical reasons it seemed that the midway point, about 2015, would be the most appropriate. I think it was around that time that the authority made that decision. If you would like a little more detail, I can take on notice.

Answer:

The concept of a review in approximately 2015 was first considered in detail by the Murray-Darling Basin Authority (the Authority) at its meeting of 5 July 2011. However other considerations leading up to this date contributed to the final policy.

In its meetings of 7 June, 21 June and 5 July 2011 the Authority considered including a process for adjusting SDLs as a result of environmental works and measures in the draft Basin Plan.

At the Authority meeting of 26 July, the Chair of the Authority emphasised the importance of including a proposed mid-point review between 2012 and 2019 in the Basin Plan.

By the time of the Authority's meeting of 24 August a review in 2015, with an amendment process proposed for 2017, had been settled on as a suitable half way point.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 118

Topic: Basin Plan – commissioning of

additional advice

Proof Hansard Page and Date 54 (18/10/11)

or Written Question:

Senator Birmingham asked:

Senator BIRMINGHAM: What prompted that review?

Dr Dickson: We have undertaken reviews all along the way. I think there were three reviews last year of just this particular method. I will have to get you the details on that. We have undertaken a number of reviews in the past of the method. This is just part of our ongoing process of making sure we get good scientific exposure to the methods that we are using.

Answer:

In 2010, two independent reviews of the science that underpins the sustainable diversion limits and the approach used to determine an environmentally sustainable level of take were completed.

The first review was performed by an expert panel of Australian based scientists including Dr Phil Price (Mackellar Consulting Group), Professor Jenny Davis and Dr Nick Bond of Monash University, Dr Simon Linke of Griffith University, Dr Michael Stewardson of the University of Melbourne, Dr Marcus Cooling of Ecological Associates and Dr Jane Roberts, Vegetation Ecologist.

The second review was performed by an international expert panel which included Professor John Briscoe Professor, Harvard School of Engineering and Applied Sciences (United States), Professor Asit Biswas of the Third World Centre for Water Management, Professor Gene Likens of the Cary Institute of Ecosystem Studies, and Mr Per Bertilsson of the Stockholm International Water Institute, which reviewed all aspects of the approach being taken for the proposed Basin Plan.

Given the extensive additional work undertaken since the reviews in 2010 the Murray-Darling Basin Authority invited CSIRO to conduct a review of the parts of the information base and analyses used to estimate an Ecologically Sustainable Level of Take for the Murray-Darling Basin. The review drew on expertise in the ecological and hydrological sciences both within and outside of CSIRO. The panel members were: Dr Bill Young (CSIRO, Water for a healthy Country Flagship), Professor Gary Jones (eWater CRC), Dr Ben Gawne (La Trobe University/Murray-Darling Freshwater Research Centre), Dr Nick Bond (Griffith University) and Dr Justin Brookes (University of Adelaide).

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 119

Topic: MDBA Staffing

Proof Hansard Page and Date Written

or Written Question:

Senator Birmingham asked:

- 1. Within The Murray-Darling Basin Authority, how many divisions are there and what are their names?
- 2. How many staff are there in each of these divisions?
- 3. Where is each division located and what are their staffing numbers?

Answer:

1. There are five organisational units within the Murray-Darling Basin Authority as follows:

Chief Executive Office
Basin Plan Division
Natural Resource Management Division
River Murray Division
Corporate Services Division.

2. As at 31 October 2011 the number of staff in each organisational unit was as follows.

These figures include inoperative staff.

- 7 Chief Executive Office
- 108 Basin Plan Division
- 83 Natural Resource Management
- 62 River Murray Division and
- 64 Corporate Services Division
- 3. All units and staff are located in Canberra except for three Basin Plan Division staff located in Albury and two River Murray Division staff located in Adelaide.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 120

Topic: MDBA Accommodation

Proof Hansard Page and Date Written

or Written Question:

Senator Birmingham asked:

- 1. How many office locations are there within The MDBA and where is each located?
- 2. What is the size of each of these offices and are they leased or owned?
- 3. If the office is rented, what is the amount and what is the breakdown of rent per square metre?
- 4. What is the value of the buildings owned and what is the depreciation of those buildings?

Answer:

1 to 3 The Murray-Darling Basin Authority (MDBA) has four office locations as follows:

Location	Size	Leased/Owned	Annual rent	Rent per sq.mtr
			(GST exclusive)	(GST exclusive)
51 Allara Street Canberra	$3,863 \text{ m}^2$	Leased	\$1,506,570	\$390
City				
40 Allara Street Canberra	805 m^2	Leased	\$309,925	\$385
City				
213 Greenhill Road,	22 m^2	Licence	\$25,200	N/A flat rent not
Eastwood, Adelaide		Agreements		based on per sq. mtr.
The Charles Sturt	30 m^2	Licence	\$40,000	N/A flat rent not
University, Albury		Agreements		based on per sq. mtr.

4. The MDBA does not own any office buildings.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 121

Topic: MDBA Expenditure

Proof Hansard Page and Date Written

or Written Question:

Senator Birmingham asked:

- 1. Provide details on expenditure for The Murray-Darling Basin Authority on the following: advertising, travel (including breakdown: of business versus economy, domestic versus international), hospitality and entertainment, ICT, consultancy, education/training of staff, external accounting, external auditing, external legal and membership or grants paid to affiliate organisations?
- 2. Provide a further breakdown of the above expenditure for each division with the Murray-Darling Bain Authority: advertising (\$mn), travel (including breakdown: of business versus economy, domestic versus international) (\$mn), hospitality and entertainment (\$mn), ICT (\$mn), consultancy (\$mn), education/training of staff (\$mn), external accounting (\$mn), external auditing (\$mn), external legal and membership or grants paid to affiliate organisations (\$mn)?
- 3. Within each divisional area, provide a further breakdown of expenditure under each Executive Manager: advertising (\$mn), travel (including breakdown: of business versus economy, domestic versus international) (\$mn), hospitality and entertainment (\$mn), ICT (\$mn), consultancy (\$mn), education/training of staff (\$mn), external accounting (\$mn), external auditing (\$mn), external legal and membership or grants paid to affiliate organisations (\$mn)?
- 4. Please provide a breakdown over the forward estimates of each program or activity including: program title, program summary, is the program ongoing, lapsing, or terminating, breakdown of administered and departmental costs, program staffing numbers and location?

Answer:

1. Details of expenditure for the Murray-Darling Basin Authority (the Authority) in 2010-11 is as follows:

	Total (GST Exclusive)
Advertising	131,355
Travel	2,673,767
Domestic - Business (Flights Only)	289,319
Domestic - Economy (Flights Only)	1,129,943
Total Domestic Travel (includes all domestic travel expenditure)	2,646,092
International - Business (Flights Only)	22,069
International - Economy (Flights Only)	-
Total International Travel (includes all international travel expenditure)	27,675
Hospitality and entertainment	112
ICT	2,075,830
Consultancy	8,008,274

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Education/training of staff	540,776
External Accounting	-
External Auditing	409,882
External Legal	1,878,004
Grants paid to affiliate organisation	-

2. Breakdown of the above expenditure for each division with the Authority is as follows:

	River Murray	Natural Resource Management	Basin Plan	Corporate Services	Engagement, Secretariat & Communications	Total (GST Exclusive)
Advertising	1,307	20,975	33,865	11,378	63,830	131,355
Travel	322,784	405,855	228,494	110,676	1,605,958	2,673,767
Domestic - Business (Flights Only)	28,147	31,386	29,677	30,556	169,553	289,319
Domestic - Economy (Flights Only)	166,544	175,294	126,429	34,853	626,823	1,129,943
Total Domestic Travel (includes all travel expenditure)	309,611	394,142	225,705	110,676	1,605,958	2,646,092
International - Business (Flights	·			110,070	1,000,000	
Only) International -	11,239	8,218	2,613	-	-	22,069
Economy (Flights Only)	-	-	_	_	_	_
Total International Travel (includes all						
travel expenditure) Hospitality and	13,173	11,712	2,790	-	-	27,675
entertainment	-	-	-	-	112	112
ICT	89,695	274,903	18,240	1,579,062	113,931	2,075,830
Consultancy	46,680	2,749,330	3,580,746	1,242,135	389,383	8,008,274
Education/training of staff	22,410	103,861	49,509	333,120	31,877	540,776
External Accounting	-	-	-	-	-	-
External Auditing	-	52,500	194,130	-	163,251	409,882
External Legal	40,270	259,934	982,374	584,355	11,070	1,878,004
Grants paid to affiliate organisation	-		-			

3. Further breakdown of expenditure under each Executive Manager is **Attachment A**.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

4. A breakdown of each program over the forward estimates as given in the 2011-12 Portfolio Budget Statements is given below:

Program	Program Summary	2012	2-13	2013	3-14	2014	4-15
		\$'000	Staff (FTE)*	\$'000	Staff (FTE)*	\$'000	Staff (FTE)*
Basin Plan	To prepare, implement, and enforce the Basin Plan, including accreditation of jurisdictional water resource plans.	39,158	143.00	16,646	143.00	16,526	143.00
Natural Resource Management	To develop and implement strategies for the protection and enhancement of the Basin's shared water and other natural resources.	43,485	98.60	45,137	98.60	46,091	98.60
River Murray	To manage, operate and sustain the River Murray assets to deliver states' shares of water and environmental outcomes in the River Murray System.	96,355	53.40	70,640	53.40	74,308	53.40
	Total	178,998	295.00	132,423	295.00	136,925	295.00

^{*}FTE = Full Time Equivalent, corporate staff are apportioned across programs.

All funding is departmental and all staff are located in Canberra except for three staff who are located in Albury and two staff who are located in Adelaide.

Attachment A: Breakdown of expenditure under each Executive manager

Executive manager ED - River Murray			ivaturai Kesource Management	1		Basin	Basin Plan		Corporate Services	te Services	Secreteriat &	Exclusive)
		GM - River Environment Management	GM - Basin Program Implementation	ED - Natural Resource Management	ED - Basin Plan	GM - Water Planning	GM - Environment Planning	GM - Basin Plan Development	Chief Executive	ED - Corporate Services	ED - Engagement, Secretariat & Communications	
Advertising	1,307	13,377	7.598	1	,	4,618	8,337	20,911		11.378	63,830	131,355
Travel	322,784	108,269	245,156	52,430	68,902	107,071	34,547	17.974	96,395	14,280	1,605,958	2,673,767
Domestic - Business (Flights Only)	28.147	6.204	13.196	11.986	106'21	2,069	861'9	3,508	30.556		169,553	289,319
Domestic - Economy (Flights Only)	166,544	54,537	96.854	23,902	26,436	75,284	15.442	9,266	28.414	6.438	626,823	1,129,943
Total Domestic Travel (includes all travel expenditure)	309.611	619:201	234.094	52.430	68.902	107.071	31.758	17.974	368 96	14.280	1,605,958	2 646 092
International - Business (Flights Only)	11,239		8,218	•	•		2,613			•		22,069
International - Economy (Flights Only)				1								
Total International Travel (includes all travel												
expenditure)	13.173	650	11.062				2,790	1		1		27,675
Hospitality and entertainment	r		•				•	,	•	•	112	112
ICT	89,695	37,178	185.810	51,916	3,610	466.8	2,352	3,281	6,084	1,572,978	113,931	2,075,830
Consultancy	46,680	58,489	1,802,141	888,847	000,07	484,213	2,631,370	394,817	,	1,242,335	389,383	8,008,274
Education/training of staff	22,410	17,344	83,117	3,400	•	25,177	10,745	13,586	635	332,485	31,877	540,776
External Accounting	•			1	•		•	,	•	•		
External Auditing			52,500		194,130	1			•	•	163,251	409,882
External Legal	40,270	4,193	7,159	248,581	st	1	342	982,032		584,355	11,070	1,878,004
Grants paid to affiliate organisation	1	•	1	4	4	1		1		1	,	

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Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA Question No: 122

Topic: Grants approved by the

Murray-Darling Basin

Authority

Proof Hansard Page and Date Written

or Written Question:

Senator Birmingham asked:

1. In reference to the list of grants approved by the MDBA which was tabled in the Senate on 24 June 2011, one of the items on the list, under the Natural Resources Management division, was to the University of Melbourne for program name 'How effective are environmental flows' to the value of \$99,000. Please provide details on the status of this project. Was it to provide a report? Has such a report been provided? If so, please provide a copy.

Answer:

1. This is a three year Australian Research Council project, which commenced on 22 March 2011. The University of Melbourne is the adminstering organisation with responsibility for reporting progress of the project to the Australian Research Council each year and the first progress report is due in January 2012.

Answers to questions on notice

Sustainability, Environment, Water, Population and Communities portfolio

Supplementary Budget Estimates, October 2011

Program: Division or Agency: 4: MDBA **Question No:** 123

Topic: Basin Plan delay

Proof Hansard Page and Date Written

or Written Question:

Senator Birmingham asked:

- 1. When will the proposed basin plan be released?
- 2. When is the final basin plan expected to be released?
- 3. What is the forward timing schedule from now until the release of the basin plan?

Answer:

- 1. The proposed Basin Plan will be released on 28 November 2011.
- 2. The tabling of the Basin Plan in the Parliament is subject to the deliberations and comments of the Legislative and Governance Forum on the Murray-Darling Basin and the Commonwealth Minister for Water.
- 3. Based on a November 2011 commencement of a formal consultation period, the timetable would be as follows:
- April 2012: end of formal consultation. Note that the formal consultation period has been extended from the minimum required 16 weeks to 20 weeks, in order to account for the Christmas and New Year holiday period.
- April May: Murray-Darling Basin Authority revises draft Basin Plan based on submissions and outcomes of consultation period.

May – June 2012: draft Basin Plan along with accompanying documents, be submitted to the Legislative and Governance Forum on the Murray-Darling Basin for up to six weeks consideration.

After considering the comments of the Legislative and Governance Forum on the Murray-Darling Basin, the Authority will submit a final Basin Plan to the Commonwealth Water Minister for consideration and adoption. On adoption of the plan it will be tabled in the Parliament.