

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 25

**Broad Topic:** Water available to offset  
reductions in allocations

**Proof Hansard Page and Date** 25 (19/10/10)  
**or Written Question:**

**Senator Xenophon asked:**

Mr McLeod—The figures for volumes of water that are available to offset the reductions that are identified in the guide are just that. These offsets will not necessarily change the range of 3,000 or 4,000; they merely offset the degree to which that has been already provided for through these programs. The relative offsetting will constantly be updated based on the best available information.

Senator XENOPHON—Will it make a difference to particular valleys?

Mr McLeod—Ultimately the extent to which the purchases or investments might provide for offsetting may mean that in some valleys the level of offsetting might reduce to zero very quickly. Within the guide, in the appendix, we already have a number of valleys where the proposed level of reduction has already been bridged in full.

Senator XENOPHON—Mr Freeman, perhaps the authority could take on notice that, in so far as once updated information is obtained from the state water authorities and state governments, you could provide an update as to whether that impacts on a valley by valley basis.

Mr Freeman—Yes, I can. It is important to reinforce Mr McLeod's point that that will clarify the residual gap. It will not change the total volume.

Senator XENOPHON—It will not make a difference on a valley by valley basis?

Mr Freeman—It will highlight where programs have met the reduction that is required, and therefore there is no residual impact on entitlement holders, and it will highlight where action is required, normally in the area of water purchase, in order to ensure that there is no impact. Doing that updated work will give the Commonwealth a clear indication of where they should be focusing their purchase or their water efficiency programs.

Senator XENOPHON—If you could update the committee, that would be very useful.

Mr Freeman—Yes.

**Answer:**

The Murray-Darling Basin Authority (MDBA) will prepare a regular update of estimated environmental water recovered within the basin. This information will be published on the MDBA website. Information provided on the website will identify the degree to which water recovery efforts have bridged the gap between current diversion limits and SDLs in each water resource plan area in the Basin.

Before this data can be published on the MDBA website, agreement needs to be reached with the states on the calculations used to support the figures. Feedback and agreement from the states is currently being sought.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 27

**Broad Topic:** Consultancy on social media

**Proof Hansard Page and Date** 28 (19/10/10)

**or Written Question:**

**Senator Birmingham asked:**

Senator BIRMINGHAM—The legal costs. The Sydney market research company to report on using social media such as Twitter and Facebook to the tune of \$289,053—is that an accurate cost and an accurate description or is there more to that consultancy than meets the eye?

Mr Nicholas—I would have to take that one on notice. Those figures do not match the ones that we have. That could be an estimate of development of social media pages and a call centre that we have established to manage the contact from the community in relation to the release of the guide. The description is probably something that I would need to look at.

**Answer:**

The contract value for Colmar Brunton for the “Provision of Social Media applications and Contact Centre Operations to support the engagement process in relation to the development and delivery of the Murray–Darling Basin Plan” was \$289,053 (inc GST).

The contract includes both consultancy and service delivery arrangements. The consultancy component relates to the development of a methodology for using social media applications to engage with stakeholders during the development and delivery of the Basin Plan. The service delivery component includes management of online forums, provision of call centre services for the MDBA 1800 call centre and management reporting on both the online and call centre activities.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 28

**Broad Topic:** Socio-economic impact work

**Proof Hansard Page and Date** 32 and 33 (19/10/10)

**or Written Question:**

**Senator Nash asked:**

Senator NASH—I will move on from that. I think we have made the point there. I will be very quick then. Pages 39 to 41 contain all of the socio-economic impact work that has been done to date. How much has been spent on that? If you do not have a really quick answer take it on notice for me, if you would not mind.

Dr McLeod—There was quite an extensive range of additional work that has been undertaken. I believe that somewhere in the region of \$2.9 million has been spent on social and economic work in the course of this past—

Senator NASH—If you could come back to the committee with the exact figure—take the question on notice—that would be great. Who has been appointed to undertake the new study?

Mr Freeman—No-one has been appointed at this stage. We have a panel. The panel is extensive. I believe there are 67 organisations on that panel. The panel have been asked for responses and a determination will be made at the end of next week.

Senator NASH—Can you provide the panel members to the committee?

Mr Freeman—Yes.

...

Senator NASH—Can you provide to the committee what your criteria will be for determining who is going to be the appropriate group to do this new study—the work that should have been done before?

Mr Freeman—We can provide you with the criteria for our decision; yes.

...

Senator NASH—Thank you. Can you take this on notice: with regard to the new study, could the committee be provided with the bid documentation—tender documents and the bid documentation—that goes with that.

Mr Freeman—Yes.

**Answer:**

Expenditure on socio-economic impact work

As at 19 October 2010 the total expenditure on socio-economic impact work (excluding staff support costs) is \$2,633,860 (inc GST).

Panel members

The new study “Assessment of local community impacts of proposals for the Murray-Darling Basin Plan” was sent to all members of the Murray-Darling Basin Authority's Social, Economic and Cultural Services Panel as detailed below:

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

Access Economics Pty Limited  
Adelaide Research & Innovation Pty Ltd  
AECOM Australia Pty Ltd  
ANU Enterprise Pty Ltd  
Arche Consulting Pty Ltd  
Arup Pty Limited  
Aurecon Australia Pty Ltd  
Australian Bureau of Agricultural and Resource Economics  
Australian Survey Research Group Pty Ltd  
BDA Group  
Bureau of Rural Sciences (BRS)  
Capire Consulting Group  
Centre for International Economics  
Charles Sturt University  
Colmar Brunton Social Research  
Community Solutions  
CPG Australia Pty Ltd  
CSIRO Water for a Healthy Country Flagship  
Delaney & Associates Pty Ltd  
Deloitte Touche Tohmatsu  
Design and implement limited  
EconSearch Pty Ltd  
Elton Consulting  
Environment & Behaviour Consultants  
Environmental Resources Management Australia Pty Limited  
Ernst & Young  
Evans & Peck Pty Ltd  
Frontier Economics Pty. Ltd.  
GHD Pty Ltd  
Golder Associates Pty Ltd  
Griffith University  
Halcrow Pacific Pty Ltd  
Inovact Consulting Pty Ltd  
Instinct and Reason Pty Ltd  
Institute for Rural Futures, University of New England  
Institute for Sustainable Futures, University of Technology Sydney  
Intelligent Software Development Pty Ltd  
Judith Stubbs and Associates  
Kiri-ganai Research Pty Ltd  
La Trobe University  
Lloyd Consulting  
Lovett Clarke Consulting Pty Ltd  
Mackellar Consulting Group Pty Ltd  
Marsden Jacob Associates  
ORIMA Research Pty Ltd  
Price Merrett Consulting Pty. Ltd.  
PricewaterhouseCoopers

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

Robins Consulting  
Rochester Partners Pty Ltd  
RPS Group  
Rural Solutions SA  
Sefton & Associates  
SGS Economics and Planning Pty Ltd  
Sinclair Knight Merz Pty Ltd  
SMEC Australia Pty Ltd  
Sustainable Environment Group Pty Ltd  
Synergies Economic Consulting  
The Allen Consulting Group Pty Ltd  
The Nous Group Pty Ltd  
The Social Research Centre  
UMEE Ltd  
UniQuest Pty Limited  
University of New England  
Urbis Pty Ltd  
URS Australia Pty Ltd  
Western Research Institute  
WorleyParsons Services Pty Limited

Tender documentation including selection criteria

The tender documentation, including selection criteria, for the new study “Assessment of local community impacts of proposals for the Murray-Darling Basin Plan” is detailed in Attachment A. Individual submissions are not able to be provided due to their commercial-in-confidence nature.

# **Attachment A**

## ***PROJECT BRIEF***

***Assessment of local community impacts of proposals for the Murray-Darling Basin Plan***

## **PROJECT BRIEF:**

### ***Assessment of local community impacts of proposals for the Murray-Darling Basin Plan***

#### ***Statement of Need***

*The Authority is seeking to procure expert services to assess the likely social and economic implications of proposals for the Basin Plan on local communities.*

#### ***Objective***

*The objective of this project is to provide assessments of the likely social, human, cultural, financial and economic implications of proposals for the Basin Plan on local communities in each of the MDBA's 19 regions.*

#### ***Scope and Delivery***

*This project has a focus on the local community scale and should involve the use of both quantitative and qualitative analysis to consider the range of likely negative and positive human, social, financial and economic implications. The project should consider, amongst other things, but not be confined to:*

- *Direct effects on agricultural production and other industries in the Basin*
- *Indirect or flow-on effects on other industries and business activities in the Basin. This should be considered both throughout the value chain and link to community issues*
- *Human costs and benefits, including in relation to mental health*
- *Wider social and cultural implications*
- *Financial implications*
- *Mitigation strategies including the capacity of communities to adapt*

*In undertaking this project the Authority seeks advice on short, medium and long term impacts.*

*The project should consider local implications of the Guide to the proposed Basin Plan within the Basin's 19 regions and consult extensively with local communities, specifically including local governments.*

*The project is expected to draw upon the best available existing data and information as well as collect new primary data.*

*The successful service provider is expected to work closely with the Authority and its staff.*

#### ***Deliverables***

*The following project deliverables are expected:*

1. *A first stage report outlining the proposed conceptual framework and methodology for undertaking the assessment, including an outline of the quantitative and qualitative data and methods to be used.*
2. *Initial findings and observations, based on existing data and information, presented in a discussion paper within 8 weeks of commencing the project.*
3. *A detailed draft report on the project:*
  - a. *outlining the approach and methods used as well as data sources*
  - b. *providing a compilation of the assessments for local communities for each Basin region*
  - c. *providing a summary of the overarching findings and results.*
4. *A detailed final report by 15 March 2011, incorporating feedback from the Authority on the draft report. The precise content and format of the final report will need to be agreed with Authority staff.*

5. *Powerpoint slides identifying key findings and results from the project.*
6. *Electronic versions of all reports and any related documents and data stores consistent with Authority standards and suitable for possible publication.*
7. *Presentation of the results to the Authority and other invited parties.*
8. *Participation in up to three public workshops to present the results of the project.*

**Proposed Time frame**

*The project will start as soon as possible and be completed by 15 March 2011.*

**Budget**

*Indicative project costs are in the order of \$600,000 to \$800,000 but proposals will be assessed on a value for money basis. Tenderers will be expected to provide their own estimate of the costs of providing the required services and provide sufficient material to support those estimates to the satisfaction of the MDBA Evaluation Committee.*

**Project Management**

*The MDBA project sponsor will be the MDBA Executive Director Basin Plan  
The consultants will report to the Authority.*

**Evaluation Criteria**

*The following criteria will be used to evaluation all proposals:*

<b>Criteria</b>	<b>Weighting</b>
<i>The tenderer's ability to supply the Services as demonstrated by:</i>	
<i>(a) its proposed approach to service delivery and management;</i>	<i>40%</i>
<i>(b) its capacity (including expertise and availability of key personnel and/or subcontractors); and</i>	<i>30%</i>
<i>(c) its experience and capability to undertake similar projects.</i>	<i>30%</i>
<i>The tenderer's price.</i>	<i>Unweighted</i>
<i>The extent of the tenderer's compliance with the Draft Contract.</i>	<i>Unweighted</i>
<i>The tenderer's demonstrated organisational and financial capacity.</i>	<i>Unweighted</i>



**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 29

**Broad Topic:** Commonwealth water – state  
recovery programs

**Proof Hansard Page and Date** 40-41 (19/10/10)  
**or Written Question:**

**Senator Nash asked:**

Senator NASH—I will put a number of questions on notice, Chair, and I do know that we need to move to the NWC. I want to ask this. In the guide it says that as at 30 June 2010 the Australian government water buyback and state water recovery programs had secured some 705 gigalitres of surface water in the basin. What are the state recovery programs? How much have they delivered? In terms of the government buyback, how much of that 705 is entitlement purchased by the Commonwealth and how much allocation of real water actually goes against the total of the entitlement purchased by the Commonwealth so far?

...

Ms Harwood—The state recovery programs are things like RiverBank in New South Wales. The authority has the information on those, which is how much the state run recovery programs have recovered to date.

Senator NASH—So if you could take on notice though to provide some more detail as quickly as you can. ...

...

Senator NASH—If I could also put this on notice: does the RiverBank that you were referring to go to the 3,000- or 4,000-gigalitre bracket that the authority is talking about?

**Answer:**

The following State recovery programs have been included in the 705 gigalitres (GL) figure for surface water recovered within the Murray-Darling Basin:

- a) Riverbank program – New South Wales Rivers Environment Restoration Program (approximately 42 GL);
- b) Riverbank – New South Wales Wetlands Water Recovery program (approximately 5 GL); and
- c) Victorian Loddon River Sales Deal (approximately 1 GL).

The remaining balance of the 705 GL can be attributed to water recovered by the Commonwealth.

The figures outlined above (estimates as at 30 June 2010) do not represent the actual entitlements obtained through purchases or other government initiatives but represent the long term average yield of the entitlement products.

The reported figures outlined above can be used to offset the reduction proposed under the Guide to the proposed Basin Plan for the range between 3000 and 4000 GL.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 31

**Broad Topic:** Release of the Guide to the  
Basin Plan

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

1. Can you please inform the Committee the parties that were briefed prior to the release of the Guide to the Basin Plan? When were those briefings? In particular, which State Governments were briefed on its contents?
2. The MDBA has been reported as saying that the Guide was released at 4pm on a Friday afternoon to avoid “market impacts”. Were participants in briefings on the Basin Plan, other than those attending the lockup on Friday October 8, required to sign confidentiality agreements on the contents of those briefings? If not, why not? If the MDBA was concerned about the market impacts of the information why did it not take such protections?
3. Is the MDBA undertaking any investigations into the leaking of the contents of elements of the Guide to the Draft Basin Plan, which appeared in the media on Thursday, October 7?
4. Who made the decision to separate the lockup locations for the media, stakeholders and politicians? Why were these groups separated? Did the MDBA consult with the Minister about these arrangements?

**Answer:**

1. Commonwealth Ministers, Basin State governments, the Basin Officials Committee (BOC), the Basin Community Committee (BCC), Commonwealth agencies, key stakeholders, key commentators, parliamentarians and media were briefed on the *Guide to the proposed Basin Plan* prior to its release, however not all were provided with the same level of information, particularly regarding the figures for the Sustainable Diversion Limits (SDLs). Only those attending the pre-release briefings on the day of the launch were provided with the full suite of Basin wide SDL figures.

The BOC was briefed on 1 October 2010 and BCC on 7 October 2010.

The Victorian, Queensland, South Australian, New South Wales and Australian Capital Territory governments, Commonwealth Agencies, the Hon Tony Burke, MP, Minister for Sustainability, Environment, Water, Population and Communities and Senator the Hon Don Farrell, Parliamentary Secretary for Sustainability and Urban Water were briefed between 4 and 7 October 2010.

Key stakeholders, parliamentarians and media were briefed in the afternoon of 8 October 2010, immediately prior to the release.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

2. No. Participants in the State and Commonwealth government briefings and the BCC briefings were not required to sign confidentiality agreements.  
As noted above, participants at these meetings were not provided with the full suite of confidential material provided to participants at the pre-release briefings held on the day of the launch, particularly in respect of Basin-wide SDL figures. In addition, members of the BCC have already signed confidentiality agreements upon their appointment to the BCC and public servants are duty bound to treat classified material accordingly.
3. No.
4. The Authority members made the decision. The Authority members considered that offering separate briefings to stakeholders, politicians and media would enable each group to be provided with a more targeted and responsive briefing that would better meet their needs. The Minister was informed of the Authority's proposed arrangements for pre-release briefings.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 32

**Broad Topic:** Impact of flood events on  
European Carp

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Do increased flood events in Basin wetlands have an impact on the breeding cycle of European Carp? If so, what is the impact?
2. Is the Authority monitoring any impact from increased flooding this year?
3. Has the Authority considered any possible impact as a result of the proposals under the Guide to the proposed Basin Plan?

**Answer:**

1. Yes. Increased flood events in Murray–Darling Basin wetlands are likely to have an impact on the breeding cycle of European Carp. Carp spawning is most prevalent over heavily vegetated substrates and in inundated floodplains. Flood events will provide vital breeding opportunities for a range of native fish species including Murray cod, Golden perch and Silver perch.
2. Yes.
3. Yes.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 33

**Broad Topic:** Register of water entitlements

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Does the Commonwealth have a full register of water entitlements held, by any entity, for non-irrigation purposes and non-productive purposes?
2. Please provide detail of what data the Commonwealth does have of environmental water holdings by both Government and non-Government entities.

**Answer:**

1. States are responsible for managing and maintaining 'Water Entitlement Registers' (State Registers). These State Registers cover all water entitlement holders regardless of the primary use of the water (for example, irrigation, non-irrigation, urban and so forth). The Commonwealth works with States to prepare various accounts or reports on the different uses of water.
2. On an annual basis, the MDBA prepares two reports on recovered environmental water within the Murray–Darling Basin. These reports are made publicly available through the MDBA website.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 34

**Broad Topic:** Changes to the *Water Act 2007*

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Has the Authority canvassed the need for changes to the *Water Act 2007* at any time? If so, please detail when such discussions were had, involving whom, and what conclusions were made.
2. Has the Authority ever requested the Department or Minister consider changes to the *Water Act 2007*? If so, when and what changes were requested?
3. Has the Authority ever been asked to comment on the need for any changes to the *Water Act 2007* by either the Department or the Minister? If so, when?

**Answers:**

1 & 2. Yes, there have been discussions at Authority staff level, as detailed in the table below.

Possible amendment	Timing and areas involved	Outcome	Date sent to Department
To clarify status of protocols under Section 18D by insertion of a new subsection into s.18D	May-June 2009, Authority staff.	Suggestion provided to the Department for consideration.	June 2009
An amendment to Item 2 of the table to s.22 be considered that replaces the words 'as far as possible' with something less onerous, e.g., 'where convenient'.	December 2009-February 2010 Authority staff and Australian Government Solicitor (AGS)	Suggestion provided to the Department for consideration.	December 2009 and February 2010
An amendment to sections 33 and 55 be considered to provide for the Basin Plan to apply, adopt or incorporate matters contained documents that are not disallowable legislative instruments, as those documents exist from time to time.	July-August 2009 Authority staff and AGS	Suggestion provided to the Department for consideration.	August 2009
An amendment to section 38 be considered to change the reference to section 18 to a reference to section 250E.	July-August 2009 Authority staff	Suggestion provided to the Department for consideration.	August 2009

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

An amendment to section 39 be considered so that its operation is limited to situations in which there is an accredited water resource plan (WRP) in place for a WRP area.	December 2009-March 2010 Authority staff	Suggestion provided to the Department for consideration.	January and March 2010
Amendments to Part 2 Subdivision D to consider whether suspension under state water management law equating to cessation of a WRP under the Water Act is unduly restrictive and whether the Act could be amended to expressly address when a state may suspend a WRP and on what terms.	March 2010 Authority staff and AGS	Suggestion provided to the Department for consideration.	March and April 2010
An amendment to section 62 be considered to change the reference to section 18 to a reference to section 250E	July-August 2009 Authority staff	Suggestion provided to the Department for consideration.	July and August 2009
An amendment to section 81(3A) be considered to refer to change in reliability rather than to 'reduction'.	August 2009 Authority staff	Suggestion provided to the Department for consideration.	August 2009

3. Yes, the Department asked for comment on Section 33 and Section 55 on 15 September 2009 and Part 7, Section 123 on 19 March 2010.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 35

**Broad Topic:** Basin Plan – involvement of states

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Have the States been provided with a draft of the Draft Basin Plan?
2. What level of information has been provided to the States during the drafting of the Plan, proposed, draft or otherwise? In general terms, what information have the States asked to provide to assist the Authority in its drafting?
3. What level of involvement have the States had in the draft Basin Plan?
4. Why did the Authority limit the involvement and assistance of the States at a public sector level?

**Answer:**

1. Yes, the States have been provided with the Guide to the proposed Basin Plan.
2. The Murray–Darling Basin Authority (MDBA) has held numerous information and technical discussions and meetings with all Basin States during the development of the Guide to the proposed Basin Plan on a range of issues. In these discussions, Basin States were provided with information and draft material on a wide range of issues including: approaches to determining sustainable diversion limits, proposed methodologies for determining key factors such as environmental assets and their water requirements, socio-economic assessment and the development of other basin plan elements such as the water quality and salinity management plan, and monitoring, evaluation and compliance programs.

Basin States were asked to provide hydrological data and models, as well as assistance in the use and interpretation of these models. They were also asked to provide information for, or comment on, a range of other elements of the Basin Plan including: environmental assets and environmental watering requirements; methodologies used to identify environmental water requirements and sustainable diversion limits; information on state water planning arrangements, the socio-economic analysis being undertaken, future directions for this work, including how MDBA's research could be better informed by, or incorporated with, current and existing data and work undertaken by the states; and water quality risks, priorities and datasets, and proposed directions for salinity specific matters.



**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

3. The Basin States provided information and were consulted and informed through a series of bilateral and multilateral meetings during the development of the Guide to the proposed Basin Plan. General detail of this consultation and input is given in part 2 above.
4. The MDBA is an independent statutory authority operating in accordance with the requirements of the *Water Act 2007*. Division 1, subdivision E of the Water Act sets out the procedure for making the Basin plan, including requirements for consultation with the Basin States, the Basin Officials Committee and the Murray-Darling Basin Ministerial Council. The MDBA has adhered to these requirements in its dealings with the States during development of the Plan.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 36

**Broad Topic:** MDBA calculations – water savings

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Nash asked:**

1. How much water has the government's saving and infrastructure investment program delivered since it commenced and have these savings been accounted for in the MDBA's calculations? If not, why not?
2. Have water savings delivered through a host of programs including the Living Murray and Water for Rivers been accounted for in the MDBA's calculations? If not, why not?

**Answer:**

1. As at 30 June 2010, the Australian Government water purchasing and state water recovery programs had secured 705 gigalitres of surface water (long term average equivalent volume) in the Murray–Darling Basin. This amount is identified in the Guide to the Proposed Basin Plan as being available to offset reductions in current diversion limits. Refer to page 153 of the Guide to the proposed Basin Plan, Volume 1.
2. Water savings delivered through a number of programs including The Living Murray and Water for Rivers have been accounted for in determining long-term average sustainable diversion limits. The current diversion limits factors in the water that has been recovered under programs such as the Living Murray which are essentially complete or the final outcomes are well known. Where other programs (e.g. Australian Government Water for the Future programs, NSW Government Riverbank program) are incomplete they are available to offset reductions in current diversion limits.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 37

**Broad Topic:** Basin Plan – science

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

1. I refer the Authority to the comments of Mike Taylor, chairman of the MDBA, that were reported by AAP on October 15 that the science “still needs to be tested”. In what ways does the science needs to be tested?
  - a. What steps have the MDBA taken thus far to “test the science”?
  - b. How is this view consistent with the view expressed in the Guide that the findings are based on the best available science?
2. Why is the Government/Murray-Darling Basin Authority continuing to rely on information that it acknowledges is incorrect, in developing the Basin Plan? In particular why has not the Sustainable Rivers Audit been updated to correctly reflect the Hydrology Index for Site 5 (Tycannah Ck at Horseshoe Lagoon) in the Gwydir Valley?

**Answer:**

1. The science needs to be tested through public scrutiny, which is occurring through the current feedback period.
  - a. The Murray–Darling Basin Authority (MDBA) commissioned a peer review process of its methods and approaches, as well as obtaining technical input and advice. The MDBA also drew on existing knowledge such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO) sustainable yields project.
  - b. The proposal described in the Guide is based on the MDBA’s assessment of the best available science at a point in time. The release of the technical background provides an opportunity for this assessment to be tested through open scrutiny and for alternative views on the science to be put forward.
2. The Sustainable Rivers Audit (SRA) has been used in a general sense to inform some elements of the Basin Plan, predominantly in its capacity to provide a consistent, scientific measure of the environmental condition of the Basin’s rivers. The MDBA has refined and updated existing hydrologic modelling to inform the Basin Plan, and does not depend on the hydrologic data presented in the SRA report. The second Sustainable Rivers Audit report is being finalised for release later this year.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 38

**Broad Topic:** Employment of Sam Leone

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. In what capacity has Sam Leone been employed by the Authority?
2. Is Mr Leone still employed by the Authority? If not, please outline the circumstances surrounding the termination of employment, including whether any notice period was required and/or given?

**Answer:**

1. Sam Leone was employed by the Authority as an Executive Level 2 , Manager, Media & Sponsorship.
2. No. Mr Leone resigned from the Authority with effect 7 October 2010. Mr Leone provided 7 working days notice.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 39

**Broad Topic:** MDBA consultancies

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Please detail the value of all consultancy services engaged by the Authority, specifying details for each consultancy valued above \$50,000 outlining the total cost, consultants engaged and services provided.
2. With reference to the story in The Canberra Times of 19 October 2010 regarding consultancy costs, and the Authority's indication it doesn't know where the \$60 million comes from, might such a figure be reached if research funds for Cooperative Research Centres (CRCs) are included? If they should not be included, why should they not be included?

**Answer:**

1. Since commencing operation on 8 September 2008 until 19 October 2010 the Murray-Darling Basin Authority (MDBA) has entered into 96 consultancy contracts valued above \$50,000 totalling \$25,517,168. This included 17 consultancy contracts with a value in excess of \$50,000 totalling \$3,415,634 transitioned from the former Murray-Darling Basin Commission on 15 December 2008. Details on the consultancies are at Attachment A.
2. The story in the Canberra Times on 19 October 2010 appears to be based on the MDBA 2009-10 Senate Order report on Departmental and Agency Contracts on the MDBA website.

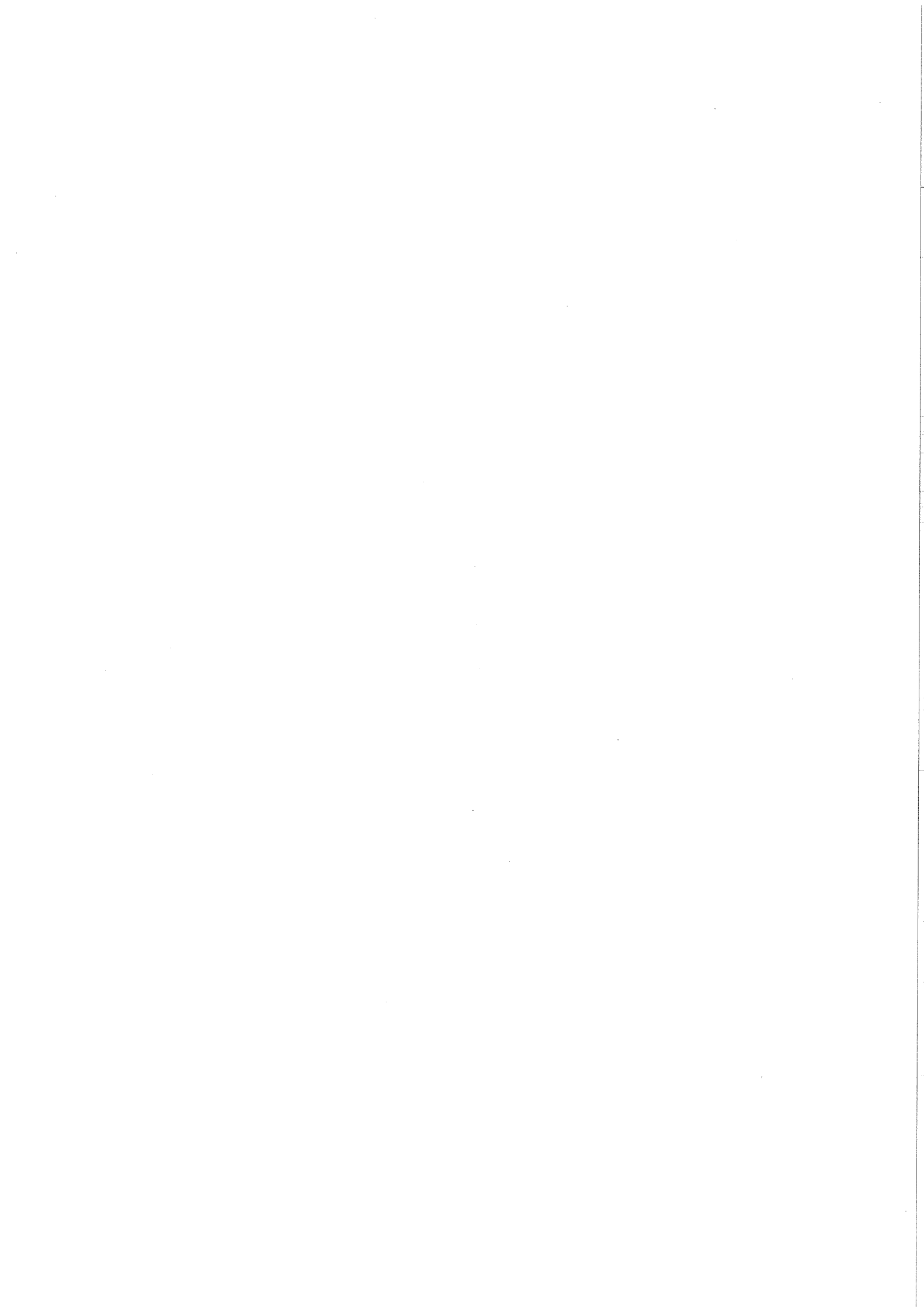
This report details all MDBA contracts, not just consultancy contracts, entered into for the period 1 July 2009 – 30 June 2010 and contracts carried over from previous financial years which were not fully performed as at 30 June 2010.

Question on Notice No. 39: Consultancies in excess of \$50,000 entered or not fully performed from 8 September 2008 to 19 October 2010		
Supplier Name	Description	Value \$
University of Ballarat	Palaeoclimate studies relevant to the natural resource management in the Murray-Darling Basin	51,700
Aquasave Consultants	Re-introduction plan for Southern Purple Spotted Gudgeon	51,975
Adrian Rizza	Assessment of the financial impacts of the proposed Basin Plan	52,365
Department of Commerce (NSW)	The Living Murray Environmental Works and Measures Program - Delivery Model Review	53,354
Charles Sturt University	Sustainable Management of Murray Spiny Crayfish	54,937
University of New South Wales	A literature review and development of experimental designs to address waterbird hypotheses on flow enhancement and retaining floodwater on floodplains interventions	55,000
Blake Dawson	Additional advice regarding MDBA's obligations in relation to river operations	55,000
RiverSmart Australia Ltd	Carp Management Plan for the ACT region/ Upper Murrumbidgee	55,000
Hyder Consulting Pty Ltd	Planning support for Environmental Watering Plan preparation	55,000
Nous Group Pty Ltd	Integration of socio-economic assessments of the Basin Plan	55,000
Saltbush Consulting Pty Ltd	Unix and ICT Security Services	56,672
BDA Group	Review of Social and Economic Studies in the Murray-Darling Basin	57,250
Terry Tobias	The Living Murray - Use and Occupancy Mapping Training Program	58,993
Paul Wettin	Advice and assistance in the development of an Environmental Management Framework for the Murray Darling Basin Plan	60,000
Monash University	Modelling the short-term socioeconomic implications of the introduction of Sustainable Diversion Limited on the Murray-Darling Basin	60,000
Centre of Policy Studies, Monash University	Using the TermH20 model to estimate the short term socioeconomic implications of the introduction of SDLs	60,000
Nous Group Pty Ltd	Assistance to Authority in development and application of procedures for the Final Basin Plan	60,811
CSIRO	Provision of expert advice on the overall framework and approach to assessment of the economic and social impacts of reducing Sustainable Diversion Limits	61,600
Department of Sustainability and Environment (VIC)	Murray-Darling Freshwater Fish Information System	66,000
Oakton Services Pty Ltd	ICT Functional Review	66,000
Australian Government Solicitor	Review of the draft 'Guide to the Proposed Basin Plan' material (Service Order 15)	69,000
Frontier Economics Pty Ltd	Populate the trade element of the monitoring and evaluation program using the existing monitoring and evaluation plan framework	70,000
Australian National University	Nature, frequency and impact of Gambusia aggression on native fish	71,155
Sefton & Associates Pty Ltd	Scoping of future Native Fish Strategy communication and engagement activities	72,600
UMEE Ltd	Assessment of the hydrological impacts of land use changes in unregulated parts of the Murray-Darling Basin	73,150
MDFRC Pty Limited	Analysis of the available phytoplankton dataset and to provide information for the strategic management and monitoring of Phytoplankton in the River Murray.	74,500
Monash University	Scoping study; Prediction of the Impact of Increasing Frequency of Bushfire	75,038
Griffin NRM Pty Ltd	Evaluation of the Narran Lakes environmental water purchase	75,746
Ecological Associates Pty Ltd	Koondrook ecological risk assessment	76,112
Triple Helix Consulting Pty Ltd	Caring For Our Country; Protecting Critical Aquatic Habitats in the Northern Murray-Darling Basin	77,000
Professor Ray Ison	Adaptive water governance and systemic thinking for future NRM - action research to build MDBA capability	77,000
RiversSmart Australia Ltd	Habitat Management Areas - further steps with 'pilot testing' the concept on the Macquarie River	77,000
Department of Employment, Economic Development and Innovation	Investigating potential impacts of Mozambique Tilapia on the Murray-Darling Basin	77,000
KPMG	Progress review of the Living Murray Initiative.	77,765
Cotton Catchment Communities Cooperative Research Centre Ltd	Development of a pilot to test the water stewardship concept	77,780
Peter Cottingham & Associates	Native Fish Strategy Five Year Review	78,738

University of New England	Water governance, management and trade in the northern Murray-Darling Basin - Provision of advice for further research	79,970
BDA Economics and Environment Pty Ltd	Provision of expert advice on the overall framework and approach to assessment of the economic and social impacts of reducing Sustainable Diversion Limits	80,800
UMEE Ltd	Services relating to Native Forest Management in silvicultural Systems and Impacts on Catchment Water Yield	83,806
Gecko consulting Pty Ltd	Assist the Authority to ensure that its responses to the publication of the Guide to the Basin Plan, the consultation process and the management of "Basin data" are carried out according to leading practice.	87,955
Allivium Consulting Pty Ltd	Provision of specialist scientific advice and products on key ecosystem functions to assist with determining the environmentally sustainable level of take for the proposed descriptive Basin Plan	88,000
Peter D Jackson	Consultancy support services to the Native Fish Program	91,960
Barma Water Resources Pty Ltd	Advice on the development of sustainable diversion limit compliance methods and options analysis of available Basin Plan policy instruments to drive water management change and compliance	93,267
RMCG	Review of the Basin Salinity Management Strategy costs functions	99,000
SMEC Australia Pty Ltd	Study of Afforestation Risks to Shared Water Resources in Murray-Darling Basin	99,715
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION	Effects of change in water availability on Indigenous people of the Murray-Darling Basin	100,000
Access Economics Pty Ltd	Broad interim assessment of the socio-economic impact of water recovery in the Living Murry	110,000
John Shepherd	Basin Salinity Management Strategy (BSMS) Annual Audit	115,225
Adrian Rizza	Services in relation to advice on potential financial and socio-economic impact from Draft and Final Basin Plans	116,100
South Australian Research & Development Institute Aquatic Sciences	Fish spawning in the Lower River Murray Icon sites South Australia: with reference to drought intervention monitoring	118,293
Geometry Pty Ltd	Basin Salinity Management Strategy (BSMS) Registers Database Stage 2	119,878
Department of Agriculture, Fisheries & Forestry acting through & represented by the Bureau of Rural Sciences (BRS)	Indicators of community vulnerability, resilience and adaptive capacity across the Murray-Darling Basin	120,000
Kiri-Ganal Research Pty Ltd	Research Capacity to Adaptively Manage under Climate Change and Variability	149,430
Australian Water Environments Pty Ltd	Flood recession salt mobilisation from floodplain of the River Murray	149,622
SMEC Australia Pty Ltd	Review of Asset Register and Revaluation of the River Murray Water (RMW) Assets at 30 June 2009	155,500
Hyder Consulting Pty Ltd	Expert advice and review of the existing monitoring, evaluation and review framework across the various Basin Plan elements to meet the requirements of the Water Act 2007	157,216
Aquaterra Consulting Pty Ltd	Development of refinements for the Mallee Zone Hydrogeologic Model for Victoria and NSW B Register 'Legacy of History' Assessments	164,648
Warren Martin & Associates Pty Ltd	Stage one review of the Murray-Darling Basin Agreement	170,000
Sinclair Knight Merz Pty Ltd	Implementation costs of the Basin Plan monitoring and evaluation program and alignment with current programs and impacts of change	173,590
Roger J Shaw	Basin Salinity Management Strategy Annual Audit	174,363
Heritage Computing	Basin Salinity Management Strategy Annual Audit	174,363
Department of Sustainability and Environment	Scoping study to determine methodologies and data availability for identifying native fish hotspots in the Murray-Darling Basin	175,912
Centre for International Economics	Cost/benefit analysis of the introduction of Sustainable Diversion Limits in the Murray-Darling Basin	180,593
Scott Spencer	Stage one review of the Murray-Darling Basin Agreement	190,000
Sinclair Knight Merz Pty Ltd	Impacts of Climate Change on the Murray-Darling Basin's Water Quality	198,000
Alluvium Consulting Pty Ltd	Identification of key ecosystem functions and their associated environmental water requirements for the Basin Plan.	198,046
KPMG	Assistance to the Authority in managing issues arising from the release of the Guide to the Basin Plan.	210,000
Roger Wickes Project Services Trust	Basin Salinity Management Strategy Annual Audit	213,363

Nous Group Pty Ltd	Assistance to the Authority in managing issues arising from the release of the Guide to the Basin Plan.	213,400
Griffith University	Impacts on Aquatic Ecosystems in the Murray-Darling Basin arising from climate Change	220,220
Michael Stewardson	Audit services to the Independent Sustainable Rivers Audit Group (ISRAG)	231,000
University of New England	Audit services to the Independent Sustainable Rivers Audit Group (ISRAG)	231,000
Jane Morton McGregor Roberts	Audit services to the Independent Sustainable Rivers Audit Group (ISRAG)	231,000
Sinclair Knight Merz Pty Ltd	Risk of climate change impacts on salinity dynamics and mobilisation processes in the Murray Darling Basin	244,805
Optimatics	Use of Optimisation I River Murray Models - Stage III	272,250
ANU Enterprise Pty Ltd	Developing a Bayesian Network for Basin Water Resources risk assessment	327,741
Department of Agriculture, Fisheries and Forestry through the Australian Bureau of Agricultural and Resource Economics	Social and economic advice, modeling and analysis	328,042
Parsons Brinckerhoff Australia Pty Ltd	Sustainable Diversion Limits Submissions Technical Review	330,000
Sinclair Knight Merz Pty Ltd	Salinity Targets Review	338,134
Terranean Mapping Technologies Pty Ltd	Namoi LIDAR and Imagery project 2008	355,983
Sinclair Knight Merz Pty Ltd	Development and implementation of methods to consistently assess risks to shared water resources in the Murray-Darling Basin	379,685
Sinclair Knight Merz Pty Ltd	Barmah Choke Study - Preferred Option Development	431,144
Australian Government Solicitor	Legal advice on the Water Act 2007 and implementation of the Basin Plan	433,675
BMT WBM Pty Ltd	Modelling of a Virtual Weir	461,572
Lawlab Pty Ltd	Conveyancing services for the transfer of water entitlements under the Pilot Environmental Purchase Project	488,400
Department of Sustainability and Environment (VIC)	Native fish recovery following the removal of alien fish species	493,284
Sinclair Knight Merz Pty Ltd	Assessment of the hydrological impacts of unregulated farms dams in the Murray-Darling Basin	504,182
Hassall & Associates Pty Ltd	Establishment of an asset register for Commission land and easements	550,000
University of Sydney	Susceptibility of previously untested Basin fish species to EHN Virus, and the epidemiology of EHN Virus in the wild	641,692
Department of Sustainability and Environment (VIC)	Methods for discriminating hatchery fish and outcomes of stocking in the Murray-Darling Basin	697,479
Australian Bureau of Statistics	Socio-economic context for Murray-Darling Basin Plan	726,910
Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Groundwater Assessments for the Murray-Darling Basin Authority's Basin Plan Stage 2	736,606
Marsden Jacob Associates Pty Ltd	Economic and social profiles and impact assessments in the Murray-Darling Basin	989,752
CSIRO Land and Water	River system modelling for the preparation of the Basin Plan	1,612,945
Commonwealth Scientific and Industrial Research Organisation	Groundwater assessments for the Murray-Darling Basin Authority Basin Plan	1,924,987
Terranean Mapping Technologies Pty Ltd	Murray-Darling Basin Remote Sensing Data Acquisition	4,336,424
	<b>Total Value</b>	<b>25,517,168</b>
	<b>Count</b>	<b>96</b>





**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 40

**Broad Topic:** Research re preparation of the  
Guide to the proposed Basin  
Plan

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Please provide a breakdown of research funding related to preparation of the Guide to the proposed Basin Plan, by:
  - a. Environmental research
  - b. Surveys and research on the social and economic impacts?
2. Which consultants were engaged to undertake key research, in particular all consultants engaged to undertake economic, social or socioeconomic impact research? In each case, please provide:
  - a. The dates each research study or survey was commissioned
  - b. The written consultant's briefs together with any verbal instructions; and
  - c. Please provide the survey questions and the instructions regarding the profile of people to be surveyed.

**Answer:**

- 1a Environmental research expenditure (excluding staff support cost) related to the preparation of the Guide to the proposed Basin Plan as at 19 October 2010 totalled \$2,634,834 (including GST).
- 1b Expenditure (excluding staff support cost) on surveys and research on the social and economic impacts related to the preparation of the Guide to the proposed Basin Plan as at 19 October totalled \$2,666,796 (including GST).
- 2a&b The following table lists the consultants engaged to undertake key economic, social or socioeconomic impact research and the dates the contract execution date.

	<b>Consultants engaged</b>	<b>Date of contract execution</b>	<b>Consultant brief</b>
1	Australian Bureau of Statistics, Australian Bureau of Agricultural and Resource Economics & the Bureau of Rural Sciences	5 May 2009	See appendix A
2	Bureau of Rural Sciences and the University of New England	13 March 2010	See appendix B
3	BDA Group & Australian National University	5 February 2010	See appendix C
4	Australian Bureau of Agricultural and Resource Economics	18 May 2010	See appendix D

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

	<b>Consultants engaged</b>	<b>Date of contract execution</b>	<b>Consultant brief</b>
5	University of Queensland	23 June 2010	See appendix E
6	CSIRO	4 May 2010	See appendix F
7	Frontier Economics Pty Ltd	22 January 2010	See appendix G
8	Charles Sturt University & CSIRO	20 August 2010	See appendix H
9	Marsden Jacob Associates Pty Ltd	24 March 2010	See appendix I
10	Adrian Rizza	20 August 2010 & 5 August 2010	See appendix J
11	Nous Group Pty Ltd	9 July 2010	See appendix K
12	Centre of Policy Studies, Monash University	27 October 2010	See appendix L
13	Centre for International Economics	26 August 2010	See appendix M
14	GHD	4 January 2010	See appendix N

The following table lists the consultants engaged to undertake other key environmental and monitoring and evaluation research and the dates that the contract for each study was executed.

	<b>Consultants engaged</b>	<b>Date of contract execution</b>	<b>Consultant brief</b>
15	CSIRO	11 June 2009	See appendix O
16	CSIRO and Flinders University	11 June 2009	See appendix P
17	CSIRO	1 <sup>st</sup> October 2009	See appendix Q
18	ANU Enterprise	24 November 2009	See appendix R
19	Alluvium Consulting	13 November 2009 & 19 January 2010	See appendix S
20	Ecological Associates	28 April 2010	See appendix T
21	Auricht Projects	11 December 2009	See appendix U
22	SKM	27 August 2009	See appendix V
23	Murray Darling Freshwater Research Centre	24 November 2009	See appendix W
24	Karoo Consulting	27 November 2009	See appendix X

Any verbal instructions provided to consultants was provided consistently with reference to the information included in the Authority's procurement documentation.

- 2c The only consultancy which involved a survey was the Marsden Jacob Associates (MJA) consultancy (reference 9 above) which included a survey of Basin residents to enhance the Murray-Darling Basin Authority's understanding of the social and economic circumstances of Basin communities.

Copies of the survey instruments for the business, community, dryland and irrigator surveys are attached as follows:

Appendix 1 Business phone survey instrument - Economic and social profiles and impact assessment in the Murray Darling Basin

Appendix 2 Community phone survey instrument - Economic and social profiles and impact assessment in the Murray Darling Basin

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

- Appendix 3      Dryland phone survey instrument - Economic and social profiles and impact assessment in the Murray Darling Basin
- Appendix 4      Irrigators phone survey instrument - Economic and social profiles and impact assessment in the Murray Darling Basin

The Survey forms were developed by MJA and their sub-contractor. The survey work was not a specific requirement of the Project Brief but rather one of the tools MJA offered within their proposal to satisfy the broader requirements of the Project Brief.

There were no instructions from the MDBA to the consultants regarding the 'profile of people to survey'. Advice from the consultants was that such a survey should include Irrigators, Other Farmers, Businesses and Community members.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 41

**Broad Topic:** Considerations in developing  
the Guide to the proposed  
Basin Plan

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

1. Was any consideration given, during development of the Guide to the proposed Basin Plan, to planned or potential flows into the Coorong from the South Australian Government's Upper South East Dryland Salinity and Flood Management Program?
2. Were all so called 'sleeper licences' considered in the development of the Guide to the proposed Basin Plan? If so, how have they been considered? Are they all assumed to be activated?

**Answer:**

1. Yes.
2. Sleeper licences have been considered in the development of the Guide to the proposed Basin Plan. The current diversion limits identified in the Guide are the best estimates available of the legal right to extract water from the Basin. In broad terms the current surface water diversion limits are the limits set by existing water resource plans, or current use where no plan limit exists. In this way sleeper licences are accounted for within the current diversion limit.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 42

**Broad Topic:** Menindee Lakes and Broken Hill water supply

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

1. Was the MDBA consulted before the Government entered into a Memorandum of Understanding with the New South Wales Government on the redesign of the Menindee Lakes?
2. In the Guide to the proposed Basin Plan, has the MDBA assessed the urban water needs of Broken Hill? If so, how much are they, and how will they be met under the MDBA's Guide?

**Answer:**

1. Yes, to the extent that the Murray Darling Basin Authority (MDBA) has provided technical advice in the Darling River Water Savings Project which led to the Menindee Memorandum of Understanding between the New South Wales and Australian Governments.
2. Yes. Section 86A(3) of the Act defines the River Murray System as including the Lower Darling and Menindee Lakes. Consequently, the population of Broken Hill is included in the MDBA's calculation of the volume of water required to meet critical human water needs (CHWN) for the New South Wales communities dependent on the River Murray system. This volume for all of NSW is 61 GL per year. The population of Broken Hill was included in the total population in NSW dependent on the River Murray System. Each State will be required to determine the needs of each individual community.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 43

**Broad Topic:** Groundwater and surfacewater

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

1. What is the MDBA's views on the connectivity of groundwater and surfacewater?
2. How will the limits on groundwater use be enforced?

**Answer:**

1. Generally surface water and groundwater systems are not separate resources but are components of one system. Where the connection is strong, groundwater extraction may directly affect surface-water streamflow by inducing leakage to groundwater, or intercepting groundwater-derived base flow over short and long time frames. Similarly, surface-water extraction and management regimes may affect the availability of groundwater.

Over the critical dry-season low-flow period, groundwater discharge may represent 100% of the streamflow, particularly in upper catchments. This underscores the importance of groundwater discharge in maintaining the health of most streams and rivers in the Basin.

Further details are provided in Sections 2.6 (pages 42-45) and 4.4 (pages 173-174) of the Guide to the Proposed Basin Plan, Volume 2.

2. Basin states will continue to enforce compliance by water rights holders under Basin state water legislation and water resource plan rules. The Commonwealth *Water Act 2007* operates concurrently with the Basin State legislation and nominates MDBA as the appropriate enforcement agency. MDBA will collaborate with Basin States regarding the concurrent regulation of water rights holders.

MDBA will primarily regulate compliance by Basin States and Commonwealth agencies, with water resource plan rules that implement the limits. Basin States are required to report annually to MDBA on compliance with the limits (section 71 of the Act).

The full details of the proposed compliance arrangements are described in Sections 7.1 and 7.2 of the Guide to the Proposed Basin Plan, Volume 2. Specific details of the Groundwater diversion limit compliance method are on page 353.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 44

**Broad Topic:** Basin Plan – proposed and final

**Proof Hansard Page and Date  
or Written Question:** Written Question

**Senator Joyce asked:**

1. When does the MDBA intend to release the proposed Basin Plan? Will the subsequent consultation period only go for statutory requirement of “at least 16 weeks” or will it go for longer?
2. When does the MDBA expect to deliver the final Basin Plan to the Government?

**Answer:**

1. The Murray-Darling Basin Authority (MDBA) intends to release the proposed Basin Plan in 2011 after it has considered the outcomes of the House of Representatives Standing Committee on Regional Australia’s inquiry into the impact of the Murray-Darling Basin Plan in regional Australia. The Authority is considering feedback on the Guide to the proposed Basin Plan, including from recent community information sessions, prior to making a decision on the subsequent consultation period.
2. The MDBA expects to deliver a final Basin Plan to the Government in early 2012.



**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 45

**Broad Topic:** Environmental water  
management plan

**Proof Hansard Page and Date  
or Written Question:** Written Question

**Senator Nash asked:**

1. Where is the MDBA's environmental water management plan that outlines:
  - a. How water taken from the communities will be used?
  - b. What outcomes it will deliver for the environment?
2. Does the environmental water management plan include the implementation of best practice ways of delivering water?
3. Does the environment water management plan allow for infrastructure solutions to bring about win/win results for the environment and community?

**Answer:**

- 1 a. The proposed Environmental Watering Plan is set out in Section 6.2 ( p 274) in Volume 2 of the Guide to the proposed Basin Plan.
- 1 b. The proposed Environmental Watering Plan is an adaptive management plan that is based on objectives, principles and methods rather than prescribing a strict flow regime. The targets set out in the Environmental Watering Plan which are linked to the Monitoring and Evaluation Program, (Table 7.1 (p 369) of the Guide to the proposed Basin Plan) describe the outcomes it will deliver for the environment over time. Section 8.11 of Volume 1 of the Guide to the proposed Basin Plan (p 110) also outlines the environmental flow outcomes at a high level.
2. Yes.
3. The proposed Environmental Watering Plan is an adaptive management plan and has the capacity to respond to changes in infrastructure. The related question of the potential for solutions that may allow the SDL to be higher, is addressed at Section 15.1 (p 194) of Volume 1 of the Guide to the proposed Basin Plan.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 46

**Broad Topic:** Sustainable Diversion Limits

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

Can the MDBA please explain exactly what water will contribute towards achieving the SDLs?  
Will any water recovery programs outside the Government's Water for the Future programs,  
contribute to the cuts?

**Answer:**

See answer to QoN 36.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 47

**Broad Topic:** Guide to the proposed Basin  
Plan – risk allocations

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Nash asked:**

Can you explain the risk allocation provisions outlined on Section 11.2 the Guide?

**Answer:**

S74-86 of the *Water Act 2007* provides for the sharing of risks associated with reduced or less reliable water allocations arising from reductions in water availability or changes in reliability arising from the Basin Plan. Risk allocation relates to how such risks are to be shared between water access entitlement holders and governments.

The components of the risk allocation provisions are:

- Reductions to the consumptive pool or less reliable water allocation as a result of seasonal or long term changes in climate and periodic natural events such as bushfires and drought, are borne by the water access entitlement holder in accordance with s75(1A) and s81(3A) of the *Water Act 2007*.
- Reductions caused by improvements in knowledge about the environmentally sustainable level of take for water resources will be borne by water access entitlement holders, Basin states and the Commonwealth in accordance with a formula expressed under s75 (2)(3)(3A) of the *Water Act 2007*.
- Reductions arising from changes in Commonwealth Government policy are borne by the Commonwealth.

The Basin Plan must specify the Commonwealth's share of these components.

The MDBA propose that the climate and periodic natural events component will be 3% of the current diversion limits.

The MDBA propose that the knowledge component be 0% as it has not been possible to make a valid comparison of the baseline scientific information used by Basin state water resource plans with the information used for preparing the Basin Plan.

The MDBA propose that the policy component be 100% as the *Water Act 2007* represents a change in Commonwealth Government policy.

The Commonwealth must manage their share of any reductions. This is already occurring through the Government's water recovery programs.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 48

**Broad Topic:** MDBA briefings

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

Could you please provide the Committee with a list of the briefings the MDBA has given to the Minister for Water or his / her staff, and the Prime Minister, or his / her staff, in the last 3 months?

**Answer:**

The following briefings have been provided to the Minister for Water during the period 1 August to 31 October 2010:

- Incoming Government Brief.
- Appointment of an Acting Chair for the Murray-Darling Basin Authority (MDBA) while the Chair was on leave.
- Debt recovery from Collendina Pty Ltd.
- Provision of the 2009-10 MDBA Certificate of Compliance as required under the *Financial Management & Accountability Act 1997*.
- Briefing of State Governments prior to the public release of the Guide to the Proposed Basin Plan.
- Approval to table the MDBA 2009–10 Annual Report.
- How the long-term average sustainable diversion limits will operate.
- Approval for the Chief Executive to attend a senior officials dialogue in the United States on Water Management.

No briefings were provided to the Minister for Water's staff or the Prime Minister, or her staff, during the period.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 49

**Broad Topic:** Availability of engineering solutions

**Proof Hansard Page and Date  
or Written Question:** Written Question

**Senator Birmingham asked:**

Did the Authority undertake research as to the availability of engineering solutions to reduce the permanent entitlements required to be bought on the market? If so, who was commissioned to undertake the research, what was their brief and what was the cost?

**Answer:**

The Authority has not researched the availability of engineering solutions to generate water savings.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 50

**Broad Topic:** Consultation on the Guide to  
the Basin Plan

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

Do stakeholders have the ability to make formal submissions to the MDBA on the Guide to the Basin Plan? What happens to the written feedback that people provide to the Authority? How does the MDBA handle the phone calls that are made to it? Are these logged and recorded?

**Answer:**

The Authority has provided for an additional consultation process in publishing a Guide to the Proposed Basin Plan. This is specifically to generate a greater understanding of all the elements that will be covered in the Basin Plan and importantly gives an opportunity to provide the Authority with feedback and reactions to the Guide. The Authority's website advises that the Guide has been released for community discussion and feedback.

The Authority has received written feedback via emails, letters, faxes and a purpose built online feedback form and is considering feedback received up to mid- January 2011 in developing the proposed Basin Plan.

Written feedback is acknowledged and directed to a technical review team or referred to other appropriate areas of responsibility within the Authority for consideration.

A call centre was established to receive the phone calls following the release of the Guide. The phone calls are logged and information recorded on the nature of the enquiry or opinions provided.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 51

**Broad Topic:** MDB surfacewater use

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

For each decade between 1950 and 2010, and for the total period, please outline, by State or Territory and expressed both in volume and percentage terms, the change in level of Murray-Darling Basin surface water use.

**Answer:**

The change in level of Murray-Darling Basin surface water use for each decade between 1950 and 2010 is as follows:

PERIOD	AVERAGE DIVERSIONS (gigalitres/year)					
	[percentages are expressed as a percentage of the 1950-1959 figure]					
	Basin	NSW	Victoria	SA	Queensland	ACT
1950-1959	4,354	1,482	2,633	239	*	*
1960-1969	6,792 [156%]	3,081 [208%]	3,317 [126%]	395 [165%]	*	*
1970-1979	8,331 [191%]	4,445 [300%]	3,392 [129%]	493 [206%]	*	*
1980-1989	10,275 [236%]	5,982 [404%]	3,631 [138%]	546 [229%]	#	#
1990-1999	11,454 [263%]	6,484 [438%]	3,943 [150%]	605 [253%]	392	31
2000-2009	8,057 [185%]	4,118 [278%]	2,818 [107%]	604 [253%]	488	28

\* No data available

# Insufficient data for 10 year average

Source: Data from 1997-98 onwards is sourced from the Cap Register published annually in the Murray-Darling Basin Authority's (MDBA) Water Audit Monitoring Report. Data prior to that is sourced from information originally provided by States.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 52

**Broad Topic:** Water Act 2007 – legal advice

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

Has the Authority ever sought legal advice regarding its obligations under the Water Act 2007 and/or seeking specific advice interpreting sections of the Water Act 2007? If so, when was such advice sought and in regard to which sections? Please provide copies of any such advice given.

**Answer:**

The MDBA has sought and received a range of advice relating to the interpretation of the *Water Act 2007*, including from the Australian Government Solicitor and from the Office of International Law within the Attorney-General's Department. The Authority considers that these advices are subject to legal professional privilege and that disclosure of the advice may prejudice the Commonwealth's legal position.



**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 53

**Broad Topic:** Water savings through  
infrastructure improvement

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

I refer to the statement in the Guide to the proposed Basin Plan that "... Commonwealth and state water purchases and savings under the infrastructure improvement program, will recover around 2,000 GL (long-term Cap equivalent) for the environment." Please provide a breakdown of estimates used to arrive at this figure.

**Answer:**

The estimate includes 600 GL from the Sustainable Rural Water Use and Infrastructure Program and 1400 GL from the Restoring the Balance program. State environmental recovery programs comprise 48 GL/yr as at 30 June 2010 available for offset, and a conservative estimate of around 2000 GL was adopted to cover both Commonwealth and State programs. This estimate can be improved and updated as further information on the outcomes of these programs becomes available.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 54

**Broad Topic:** Reduction of diversion limits –  
Murray Mouth

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

In what percentage of years would the Authority expect the Murray Mouth to be open should the additional water provided to the environment under the Basin Plan entail:

- a. A 1500 Gigalitres per year (GL/y) reduction on current diversion limits
- b. A 1600 GL/y reduction on current diversion limits
- c. A 1700 GL/y reduction on current diversion limits
- d. A 1800 GL/y reduction on current diversion limits
- e. A 1900 GL/y reduction on current diversion limits
- f. A 2000 GL/y reduction on current diversion limits
- g. A 2100 GL/y reduction on current diversion limits
- h. A 2200 GL/y reduction on current diversion limits
- i. A 2300 GL/y reduction on current diversion limits
- j. A 2400 GL/y reduction on current diversion limits
- k. A 2500 GL/y reduction on current diversion limits
- l. A 2600 GL/y reduction on current diversion limits
- m. A 2700 GL/y reduction on current diversion limits
- n. A 2800 GL/y reduction on current diversion limits
- o. A 2900 GL/y reduction on current diversion limits
- p. A 4500 GL/y reduction on current diversion limits
- q. A 5000 GL/y reduction on current diversion limits

**Answer:**

The Murray Darling-Basin Authority (MDBA) has not modelled the specific scenarios listed. It is expected that the flow regime specified to meet targets for the environmental water requirements of the Basin will be sufficient to maintain an open Murray Mouth for a high proportion of time.

Under pre development levels the Murray Mouth would be open 97% of years. Refer to page 113 of the Guide to the proposed Basin Plan, Volume 1. It is currently open 64% of years.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA

**Question No:** 55

**Broad Topic:** Cost of socio-economic research

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Joyce asked:**

On pp. 39-41 of the Guide, the MDBA lists the socioeconomic research it has relied on. Can the MDBA provide the Committee with the value of each of the contracts it has with these organisations, when those contracts were signed and the tendering arrangements put in place to source this research?

**Answer:**

The following table lists the socioeconomic research referred to on pages 39-41 of the Guide to the proposed Basin Plan. It includes the value of each contract, the date when contracts were signed and the tendering arrangements for each contract.

<b>Socioeconomic research referred to pages 39-41 of the Guide to the proposed Basin Plan</b>	<b>Value of the contract (including GST)</b>	<b>Contract execution date</b>	<b>Tendering arrangement</b>
Australian Bureau of Statistics, Australian Bureau of Agricultural and Resource Economics & the Bureau of Rural Sciences	\$726,910	5 May 2009	Direct
Bureau of Rural Sciences and the University of New England	\$120,000	13 March 2010	Direct
BDA Group & Australian National University	\$57,250	5 February 2010	Direct
Australian Bureau of Agricultural and Resource Economics	\$410,982	18 May 2010	Open
University of Queensland(Uniquest)	\$65,000	23 June 2010	Open
CSIRO	\$100,000	4 May 2010	Direct
Frontier Economics Pty Ltd	\$41,195	22 January 2010	Direct
Charles Sturt University & CSIRO (Prof. Mark Morrison)	\$66,000	20 August 2010	Open
Marsden Jacob Associates Pty Ltd	\$1,055,927	24 March 2010	Open
Adrian Rizza	\$116,100	20 August 2010	Direct
The Nous Group Pty Ltd	\$55,000	9 July 2010	Direct
Centre of Policy Studies, Monash University	\$60,000	27 October 2010	Open

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

<b>Socioeconomic research referred to pages 39-41 of the Guide to the proposed Basin Plan</b>	<b>Value of the contract (including GST)</b>	<b>Contract execution date</b>	<b>Tendering arrangement</b>
Centre for International Economics	\$180,593	26 August 2010	Direct

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 56

**Broad Topic:** Deadlines for Basin Plan

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

What deadlines, in developing and implementing the Basin Plan, does the Authority understand it has to meet under:

1. The Water Act 2007
2. The July 2008 Intergovernmental Agreement on Murray-Darling Basin Reform; and
3. Government policy

**Answer:**

1. The *Water Act 2007* (section 41) requires the Authority to prepare a Basin Plan and give it to the Minister for adoption, as soon as practicable after the commencement of Part 2 of the Act (which commenced on 3 March 2008). The Water Act specifies a number of further requirements relating to time periods for implementation and review of the plan, once it first takes effect.
2. The July 2008 Intergovernmental Agreement on Murray-Darling Basin Reform set no deadline but does refer to the following:  
  
“The parties note that the Basin Plan will be made in early 2011.....”.
3. The Authority understands that government policy is for the Basin Plan to be made in accordance with the requirements of the *Water Act 2007* and the July 2008 Intergovernmental Agreement on Murray-Darling Basin Reform.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 57

**Broad Topic:** Guide scenarios – effect on  
key environmental assets

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

What measurable improvements does the Authority expect, under each of the three scenarios outlined in the Guide to the proposed Basin Plan, for each of the 18 key environmental assets identified by the Authority?

**Answer:**

The increased environmental flows delivered under each of the three proposed Basin Plan scenarios will provide environmental benefits to waterbirds, river red gum communities and native fish. Increased environmental flows will also improve water quality and assist with the export of salt through river systems and out of the Murray Mouth. See pages 112-119 and 175-181 of the Guide to the Proposed Basin Plan.

**Senate Standing Committee on Environment and Communications  
Legislation Committee**

Answers to questions on notice

**Sustainability, Environment, Water, Population and Communities portfolio**

Supplementary Budget Estimates, October 2010

**Program: Division or Agency:** 4: MDBA **Question No:** 58

**Broad Topic:** Reduction of diversion limits –  
economic impact

**Proof Hansard Page and Date** Written Question  
**or Written Question:**

**Senator Birmingham asked:**

What would the Authority expect the economic impact on the gross value of irrigated agricultural production to be of reductions in current diversion limits of:

- a. 1500 GL/y
- b. 2000 GL/y
- c. 2500 GL/y
- d. 4500 GL/y
- e. 5000 GL/y

**Answer:**

The Australian Bureau of Agricultural and Resource Economics (ABARE) modelled the effects of a Sustainable Diversion Limit (SDL) reduction of 3,500 GL, offset by Government infrastructure investments and water purchases to close the remaining gap to the SDLs. A copy of the ABARE report can be found at [http://daff.gov.au/\\_\\_data/assets/pdf\\_file/0011/1812971/regional-impact-mdba-2010.pdf](http://daff.gov.au/__data/assets/pdf_file/0011/1812971/regional-impact-mdba-2010.pdf).