Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 59

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** The Graphical Forecast Editor

Monitoring system – local input

**Hansard Page ECA:** 12 (24/2/09)

#### **Senator Ian Macdonald asked:**

**Senator IAN MACDONALD**—Could you take on notice to give me some information about the GFE and what part local import and local observations play in the accuracy or otherwise of that system?

**Mr Foley**—Certainly, and in the interests of time, I would be happy to supply that.

#### **Answers:**

The Graphical Forecast Editor (GFE) is the Bureau of Meteorology's Next Generation Forecast and Warning System. The new system relies on output from computer models of the atmosphere and on combining this output with the knowledge of experienced forecasters to form a database of current and forecast weather information. Automated systems can then produce worded or graphical products from this database. Overall, this allows the forecasters' efforts to be increasingly focused on the science and evolution of the atmosphere as a whole, especially for severe weather.

Local observations are an important input to the GFE system, together with an extensive range of data from satellites, aircraft, ship and ocean buoys. The weather models also use the observations upstream of the area for which forecasts are provided; as well as observations from across the country and globally under existing data exchange arrangements.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 60

**Output:** 1.3

**Division/Agency:** Bureau of Meteorology

**Topic:** Australian Sea Temperatures – ref

QoN 84 SBE

**Hansard Page ECA:** 4 (24/2/09)

#### **Senator Ian Macdonald asked:**

**Senator IAN MACDONALD**—Thank you for your answers to my questions on notice at the last estimates committee where you gave me details showing that for the seven year period between 2000 and 2006 the average surface sea temperature,

. . .

What I was looking for last time, but perhaps you can get it for me this time if you do not have it with you, is what the sea temperatures are doing around Australia. I am a Queenslander and therefore I am always interested in the Great Barrier Reef and the Gulf and right along the east coast of Australia. Do you do temperature readings of those areas?

. . .

I assume you do not have the figures in your head or in your folder there so perhaps on notice you could give me some indications over the periods that I have used, just to keep it consistent with the UK research, of the sea temperatures in the north of Australia, both east and west— wherever you do the recordings—for those same periods of 2000 to 2006 and the last 18 months perhaps updated to the last 24 months, depending on what your information is.

#### **Answer:**

The ocean waters around Australia (approx. 90°E - 170°E / Equator - 50°S) have warmed substantially over the past 100 years, with a total warming of about 1°C. The warmest year for these waters was 1998 when the sea surface temperatures averaged +0.52°C above the 1961-1990 average, while the decade 1988 through 1997 was the warmest on record, and the decade 1999 through 2008 the second warmest on record.

Figure 1 shows the annual average sea surface temperature anomaly for the tropical parts of Australia (approx. 90°E - 170°E / Equator – 20°S) including the Gulf of Carpentaria and the Coral Sea. The warming in this region is similar to the Australia region as a whole and is characterised by a steady warming trend overlaid by occasional warm *spikes* coinciding with major El Niño events such as in 1998, 1988, 1983, and 1973.

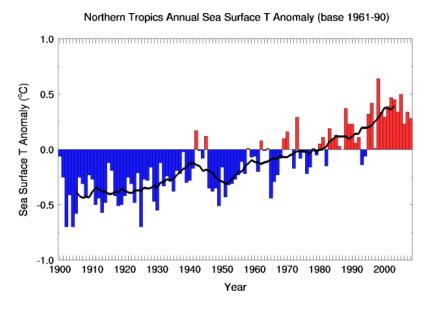
The annual average ocean temperatures around Australia (approx. 90°E - 170°E / Equator - 50°S) for the most recent seven years (2002 to 2008) are shown in Figure 2. As is evident from Figure 1, there has not been a trend over this period but rather 2002, 2003 and 2005 were each warmer years while 2004, 2006, 2007 and 2008 were relatively cooler years, while still remaining anomalously warm.

Answers to questions on notice

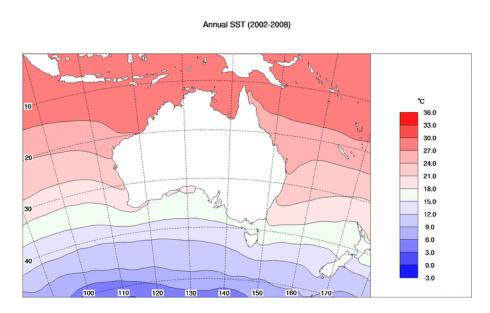
### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Ocean temperatures over the last 12-18 months show a shift from near to below average temperatures in the Coral Sea to well above average temperatures. Summer in particular has seen some very high temperatures, which peaked in December/January when most of the region was more than 1°C above average.



**Figure 1:** The mean sea surface temperature anomaly around Tropical Australia for 1900 through 2008.



**Figure 2:** The mean sea surface temperature around Australia for the most recent seven year period, 2002-2008.

Answers to questions on notice

## Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 61

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** Aviation forecasts – cancellations

**Hansard Page ECA:** 7 and 12 (24/2/09)

#### **Senator Ian Macdonald asked:**

**Senator IAN MACDONALD** – You would be aware—perhaps better than I, and I do not have the details—of plane cancellations for aircraft coming out of Melbourne. They are being told by Brisbane what the weather forecasts are—and how much fuel they put on in Melbourne depends on the weather. They get to Townsville and your model has told them one thing but the locals, from their base in Townsville, can actually see what is happening and know the models are wrong. There was quite a celebrated incident recently where an aircraft was in some trouble over that, because they could not get the right forecast. Are you aware of that?

Mr Foley—I am not aware of that particular incident.

. . .

**Senator IAN MACDONALD**—Also on notice, could you please check for me that incident? I am bit vague, but I am quite confident you will have detail with the problems at Major Creek with an aircraft because the Brisbane observers took little notice of data that was put in by the locals.

#### Answer:

The Bureau has not been able to identify any incident that related to problems for aircraft in the vicinity of Major Creek (south-east of Townsville) from a specific enquiry to the Australian Transport Safety Bureau or direct feedback from airlines. The Bureau is willing to investigate this matter further if more detail can be provided.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 62

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Efficiency Dividend

Hansard Page ECA: Written question on notice

#### **Senator Birmingham asked:**

- 1. How has the Bureau implemented the one-off two per cent efficiency dividend (ED)?
- 2. Where have savings been achieved i.e. which programs/resources have been cut?
- 3. Has the Bureau had to reduce any activities that it considers to be 'core business' or has it had to reduce service standards as a result of the ED?

- 1. Efficiencies have been found from the improvements in service delivery across the board, leveraging efficiencies from the investment in technology, and continuously adjusting the profile and structure of the organisation using the flexibility afforded through natural attrition to ensure services are delivered within the appropriations provided.
- 2. Savings have been achieved across the Bureau, by scaling activities to available appropriation as indicated in 1. above.
- 3. No.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 63

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM - Staffing

Hansard Page ECA: Written question on notice

#### **Senator Birmingham asked:**

- 1. Have staffing numbers been reduced as a result of the efficiency dividend and/or other budget cuts? If so, where and at what level?
- 2. Are there any plans for staff reductions? If so, please advise details i.e. reduction target, how this will be achieved, services/programs to be cut etc.
- 3. What changes are underway or planned for graduate recruitment, cadetships or similar programs? Are such employment programs being reduced? If so, by how many and has the Bureau done an analysis on long term effect on retention and attrition?
- 4. Has the Bureau's consultancy expenditure increased due to reduced staffing?

- 1. Efficiencies have been found from the improvements in service delivery across the board, leveraging efficiencies from the investment in technology, and continuously adjusting the profile and structure of the organisation using the flexibility afforded through natural attrition to ensure services are delivered within the appropriations provided.
- 2. There are no plans for staff reductions, other than through natural attrition.
- 3. The Bureau has a long history of national graduate recruitment campaigns to attract staff to its meteorologist category. It also attracts graduates in response to recruitment campaigns for Technical Officer categories. These campaigns are expected to continue. The Bureau has had, and continues to have, a high retention rate for staff..
- 4. No.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 64

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Appropriation

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

Noting the Government's *Federal Financial Relations Bill 2009*, which appropriates money to Treasury to pass on to the States;

- 1. Does the Bureau receive any appropriations that will be transferred to the Treasury Department?
- 2. What are these?

- 1. No.
- 2. Not applicable.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 65

Output: 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Resourcing

Hansard Page ECA: Written Questions on Notice

# Senator Birmingham asked:

Does the Bureau have enough analytical resources at its disposal? For example, the Government has cut funding to the ABS – is the Bureau provided with enough data collection for evidence-based policy making and evaluation?

#### **Answer:**

Yes.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 66

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Funding

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

- 1. Did the Bureau use any depreciation funding for recurrent expenditure in 2007-08?
- 2. Has the Bureau used any depreciation funding for recurrent expenditure this year?
- 3. Has any depreciation funding been used for purposes other than the replacement of capital items in 2007-08?
- 4. How much has the Bureau spent on the replacement of capital items in the first six months of 2008-09?

- 1. No
- 2. No
- 3. No
- 4. The Bureau spent \$25.6m on the replacement of capital items in the first six months of 2008-09.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 67

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Stimulus Package

Hansard Page ECA: Written Question on Notice

# **Senator Birmingham asked:**

- 1. Does the Bureau have any involvement in measures announced as part of the \$42 billion budget stimulus package?
- 2. If so, was (and when was) the Bureau asked for input before the stimulus package was announced?
- 3. When did the Bureau know details about the stimulus package affecting its portfolio?

- 1. No.
- 2. Not applicable.
- 3. Not applicable.

Answers to questions on notice

## **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 68

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Staffing

Hansard Page ECA: Written Question on Notice

#### **Senator Birmingham asked:**

- 1. What is the current total staffing for the Bureau permanent and temporary?
- 2. What was the total Full Time Equivalent (FTE) staffing level for the Bureau on 1 July 2008?
- 3. How many permanent staff were recruited in calendar year (CY) 2008 and in financial year (FY) 2008-09 to date? What level are these staff?
- 4. How many temporary positions exist or have been created in CY 2008 and in FY 2008-09 to date?
- 5. For CY 2008 and FY 2008-09 to date, how many employees have been employed on contract and what is the average length of their employment period?
- 6. Were there any staff cuts at the Bureau of Meteorology in 2008?
- 7. Will any volunteer or paid workers be cut this year? If so, could a detailed breakdown of when and where these job losses will occur be provided?
- 8. Will the Bureau of Meteorology be taking any new graduates in 2009?

#### **Answers:**

1. As at 28 February 2009, the number of FTE is:

Ongoing – 1270.5 FTE Non-Ongoing – 180.3 FTE

2. The total FTE for on 1 July 2008 was 1386.3.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

3. The total number of ongoing staff recruited in 2008 CY is 124 people.

Level	No of Staff
APS2	2
APS3	7
APS4	7
APS5	5
APS6	37
EL1	28
EL2 (lower)	20
EL2 (upper)	3
BB1	11
Trainee	2
SES	2
Total	124

The total number of ongoing staff recruited in the 2008-09 FY to date (28 February 2009) is 86 people.

Level	No of Staff
APS3	6
APS4	3
APS5	1
APS6	16
EL1	22
EL2 (lower)	6
EL2 (upper)	1
BB1	10
BB2	1
Trainee	4
Graduate APS	14
SES	2
TOTAL	86

(Note many of the staff in the table above are also included in the 2008 CY table)

APS1-6: Australian Public Service Level 1-6; EL1-2: Executive Level 1-2; BB1 – Bureau of Meteorology Broadband 1 (Equivalent to APS3-APS5, Professional Officer Class 1); BB2: Bureau of Meteorology Broadband 2 (Equivalent to APS3-APS6, Professional Officer Class 1 and 2 (Meteorologist)); SES: Senior Executive Service.

Answers to questions on notice

## **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

- 4. **2008 calendar year:** the average number of non-ongoing staff employed during 2008 was 181. Thirty-seven new positions with non-ongoing occupants were created.
  - **2008-09 Financial Year:** the average number of non-ongoing staff employed during 2008-09 Financial year was 190, and 51 new positions were created.
- 5. **2008 calendar year:** 102 non-ongoing contracts for temporary staff were organised, with the average length being 11 months.
  - **2008-09 Financial Year** (1 July 2008 10 March 2009) : 90 contracts were organised, averaging 8.2 months.
- 6. No. All staff reductions have been a result of natural attrition.
- 7. No.
- 8. The Bureau recruited 15 science graduates in February 2009 to commence training as weather forecasters consistent with its annual trainee meteorologist intake.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 69

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Underspends

Hansard Page ECA: Written Question on Notice

### **Senator Birmingham asked:**

- 1. Which programs are currently tracking for an underspend this financial year?
- 2. How many of the Bureau's funding programs/budget measures lapse this Financial Year and what are they?

- 1. The Meteorology Program is tracking for a slight underspend this financial year.
- 2. None.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 70

Output: 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Gershon Review

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

- 1. What impact will the Gershon Review have on the Bureau?
- 2. How much money will be saved?
- 3. Will the Bureau be required to return any money to Budget for 2009-10?

- 1. The Bureau expects to realise some savings with the reduction of Bureau "business as usual" ICT spending.
- 2. It is not possible to determine the savings at this stage.
- 3. The Bureau has not been advised of any required return.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 71

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Media Monitoring

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

- 1. How much was spent on media monitoring in CY 2008?
- 2. How much has been spent on media monitoring in FY 2008-09 to date?
- 3. How many staff in the Bureau are employed for media related duties?

- 1. \$12,441
- 2. \$7,158
- 3. 4

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 72

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Government Advertising

**Hansard Page ECA:** Written question on notice

# Senator Birmingham asked:

- 1. What communications programs has the Bureau undertaken, or is planning to undertake?
- 2. For each program, what is the total spend? Please detail including media advertisements (where placed and costs).
- 3. What was the total spend on advertising by the Bureau in CY 2008 and for FY 2008/09 to date?

- 1. Nil
- 2. Not applicable.
- 3. The Bureau of Meteorology has placed no advertisements other than those for job vacancies.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 73

Output: 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Hospitality

Hansard Page ECA: Written question on notice

# Senator Birmingham asked:

- 1. What is the Bureau's hospitality spend for CY 2008 and for FY 2008/09 to date?
- 2. Please detail date, location, purpose and cost of all events.

#### **Answers:**

1.

**Calendar Year 2008** \$16,433.95 (includes gst) **Financial Year 2008/2009 (to 18.3.09)** \$17,098.96 (includes gst)

2. See attached spreadsheet.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Date	Description	Value of Benefit (GST Incl.)		Benefit		Benefit		State	Venue
	Overseas delegation hospitality								
24/07/2008	Dinner for International job applicants (Water Division)	\$	276.00		Sabayon Restaurant, Canberra				
24/07/2008	Lunch for International job applicants (Water Division)	\$	42.00		Quince & Almond Café, Canberra				
29/07/2008	Indonesian Agency for the Assessment and Application of Technology (BAPT) Delegation dinner	\$	505.70	VIC	The Nixon Hotel, Docklands, Melbourne				
15/09/2008	9th International Conference on Southern Hemisphere Meteorology & Oceanography function	\$	2,000.00	VIC	Melbourne Aquarium, Melbourne				
	World Meteorological Organization Commission for Hydrology (Chy-XIIIO) - Reception - Geneva Switzerland (Mr Bruce Stewart, Bureau of Meteorology, elected as President of the Commission)	\$	8,000.00	Switzerland	Geneva, Switzerland				
5/02/2009	ICAO (International Civil Aviation Organization) Delegation Co-ordination Dinner	\$	665.01	VIC	Tjanabi Restaurant, Melbourne				
	Board dinners								
22/07/2008	Bureau of Meteorology Advisory Board working dinner	\$	393.50		The Naval & Military Club, Melbourne				
22/09/2008	Bureau of Meteorology Advisory Board working dinner	\$	267.00	VIC	The Naval & Military Club, Melbourne				
	Australian Hydrographers Association - dinner for J. Zimmerman	\$	95.00	ACT	Rydges - Lakeside, Canberra				
	Conferences / Workshops								
26/05/2008	AWRIS (Australian Water Resources Information System) workshop function	\$	600.00	ACT	Rydges - Eaglehawk Resort, Canberra				
6/08/2008	JRGWI-3 (Jurisdictional Reference Group for Water Information) dinner	\$	1,504.00	VIC	La Camera Restaurant, Southbank, Melbourne				
14/11/2008	JRGWI-4 (Jurisdictional Reference Group for Water Information) dinner	\$	1,479.90	VIC	La Camera Restaurant, Southbank, Melbourne				
1/12/2008	'Groundwater' workshop dinner	\$ \$	1,270.85 17,098.96		La Camera Restaurant, Southbank, Melbourne				

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 74

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Board Appointments

Hansard Page ECA: Written Question on Notice

#### **Senator Birmingham asked:**

- 1. What is the gender ratio on each board across the portfolio, and what is the total ratio across the portfolio?
- 2. In which states/territories do these Board members reside?

#### **Answers:**

The following answers relate to the *Bureau of Meteorology Advisory Board*:

1. Members: 3 female, 5 male

Ex officio members: 1 female, 1 male

The Department of the Environment, Water, Heritage and the Arts has responded to a similar question on notice (number 213) in relation to Board Members across the greater portfolio.

2. Members: 1 SA, 3 VIC, 3 ACT, 1 NSW

Ex officio: 1 VIC, 1 ACT

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 75

Output: 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Freedom of Information

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

- 1. Has the Bureau received any advice on how to respond to Freedom of Information (FOI) requests?
- 2. How many FOI requests has the Bureau received?
- 3. How many have been granted or denied?
- 4. How many conclusive certificates have been issued in relation to FOI requests?

#### **Answers:**

- 1. No.
- 2. 2.
- 3. Access provided in both cases.
- 4. None.

Answers are for the period July 2008 to 28 February 2009.

Answers to questions on notice

### Environment, Water, Heritage and the Arts portfolio

Additional Estimates, February 2009

Outcome: 1 Question No: 76

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Consultancies

Hansard Page ECA: Written Question on Notice

## Senator Birmingham asked:

- 1. How many consultancies have been undertaken or are underway since November 2007?
- 2. Please identify the name of the consultant, the subject matter of the consultancy, the duration and cost of the consultancy, and the method of procurement (i.e. open tender, direct source, etc). Please also include total value for all consultancies.
- 3. How many consultancies are planned or budgeted for this calendar year?
- 4. Have these been published in the Bureau's Annual Procurement Plan (APP) on the AusTender website? If not, why not? In each case please identify the subject matter, duration, cost and method of procurement as above, and the name of the consultant if known.

#### **Answers:**

- 1. 30
- 2. See Attachment A.
- 3. 8
- 4. See Attachment B.

NB: None of the consultancies planned have been published in the Bureau of Meteorology's Annual Procurement Plan on the Aus Tender website as the specifications or the timing for the approach to market is yet to be finalised.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

# ATTACHMENT A

Refers to 2. of Question on Notice 76.

NAME OF CONSULTANT	DESCRIPTION	DURATION	COST	METHOD OF PROCUREMENT
Aircraft Data Engineering & Consultancy	Consultancy Services for the Development of AAA Software Version 3 for Airbus A320 Flight Data Interface Management Unit	15/10/08 - 15/2/09	\$60,909.63	Direct
Australian Government Solicitor	Advice regarding specific Public Service employment matters	1/7/07 – 22/12/07	\$18,536.88	Direct
Australian Government Solicitor	Advice on Water Act	1/8/07 - 29/2/08	\$26,100.61	Direct
Australian Government Solicitor	Advice regarding Water Information Funding Agreement	1/2/08 - 30/4/08	\$27,720.56	Direct
Australian Government Solicitor	Development of Collaborative Agreement with CSIRO - Water Division	1/3/08 - 30/6/08	\$67,321.04	Direct
Australian Government Solicitor	Intellectual Property Policy advice	1/7/08 - 30/01/09	\$33,805.90	Select
Australian Government Solicitor	Advice regarding Water Regulations	1/9/08 - 30/11/08	\$15,824.05	Direct
Australian Government Solicitor	Advice regarding Flux Station	1/11/08 - 26/2/09	\$20,575.50	Direct
Ernst and Young	Consultancy Services for Drafting of Water Accounting Standards	4/2/09 - 30/4/09	\$288,048.20	Select
Gen-X Consulting Pty	Specialist Water Accounting Advice and Project Management	13/6/08 - 27/3/09	\$143,000.00	Direct

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

NAME OF CONSULTANT	DESCRIPTION	DURATION	COST	METHOD OF PROCUREMENT
Ltd				
Geoscience Australia	Consultancy Services – Volcano Monitoring in Indonesia	19/11/08 - 19/11/08	\$17,600.00	Direct
Graeme Tepper	Consultancy Services on the meteorological aspects associated with a specific fire event in North East Victoria	9/10/07 - 30/6/08	\$33,000.00	Direct
IPP Consulting Pty Ltd	Security Risk Assessment and Agency Security Plan	9/2/09 - 17/4/09	\$72,600.00	Select
ITT Visual Information Systems	Consultancy Services for Enhancement of Decision Support Tool	22/7/08 - 28/11/08	\$94,718.81	Direct
Ladbray Consortium	Advice for Supercomputer Request for Tender	1/2/08 - 30/5/08	\$19,541.87	Direct
Ladbray Consortium	Advice for Large Scale Data Storage System	1/9/07 - 30/4/08	\$12,229.51	Direct
Ladbray Consortium	Advice supporting Supercomputer Contract Negotiation	1/10/08 - 10/3/09	\$12,912.81	Direct
Len Early Pty Ltd	Financial Consultancy Services	2/6/08 - 30/8/08	\$22,000.00	Direct
NGIS Australia	Advice on Australian Water Resources Information System (AWRIS) data capture and architecture development	17/3/08 – 7/5/08	\$26,400.00	Direct
Parsons Brinckerhoff Australia Pty Limited	Consultancy Services for Metering and Rural Water Use Estimation	14/7/08 - 14/8/08	\$44,000.00	Direct
Rainman Recycled Water Systems	Hydrographic Training Consultancy	24/12/08 - 30/9/08	\$87,780.00	Open
Sinclair Knight Merz	AWRIS User Requirement Consultancy	24/6/08 - 28/10/08	\$178,530.00	Open
Sinclair Knight Merz	Data Set Identification Consultancy	19/10/07 - 31/1/08	\$40,000.00	Direct

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

NAME OF CONSULTANT	DESCRIPTION	DURATION	COST	METHOD OF PROCUREMENT
Sinclair Knight Merz	AWRIS End User Requirement Analysis	10/2/08 - 31/3/08	\$30,000.00	Direct
SMS Consulting Group Limited	Consultancy Services for the AWRIS System Development Project	24/11/08 - 30/6/09	\$145,200.00	Direct
SMS Consulting Group Limited	Consultancy Services for the AWRIS System Development Project	24/11/08 - 30/6/09	\$145,200.00	Direct
SMS Management & Technology	Consultancy Services for the Streamlining of Joint Australian Tsunami Warning Centre (JATWC) Operations	5/2/08 - 29/7/08	\$99,862.00	Direct
Stratsec.Net Pty Ltd	Protected Gateway Consultancy for Usability Design of External Web	9/10/07 - 30/6/08	\$121,800.00	Direct
The Allen Consulting Group Pty Ltd	Consultancy to Assist with Water Regulations 2008 Category 6 Data Delivery to the Bureau	19/3/09 – 12/10/09	\$193,873.00	Direct
UMEE Ltd	Advice on operation of the Water Act and regulation with respect to Hydro Power Agencies	21/1/08 - 15/2/08	\$34,182.29	Direct
TOTAL VALUE FOR ALL CONSULTANCIES (since November 2007)				

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

# ATTACHMENT B

Refers to 4. of Question on Notice 76.

NAME OF CONSULTANT (If Known)	DESCRIPTION	DURATION (If Known)	COST (If Known)	Method of Procurement	Published in APP?
	Assess the Radar Isolation and emergency shutdown trial at Bureau's training Centre (BMTC) during 2009/10				No
Vision Australia	Develop approach to application of external website				No
	AWRIS Industry Partner Consultancy. Project management and IT Specialist services		Approx \$1.2m	Restricted Tender using MUL	No
	Enterprise GIS Geospatial Consultancy		Approx \$50,000	Restricted Tender using MUL	No
	Groundwater Data Inputs to the Australian Hydrological Geospatial Fabric	2008-09 and 2009-10	Approx \$600,000	Open Tender via MUL	No
SMS Consulting Group	SMS Review of AWRIS IT Processes to include project management, User Requirements and design work.		Approx \$132,000	Direct Source	No
	Visual Communications Consultancy (videowall and video conferencing)		Approx \$400,000	Open Tender	No
Allen's Consulting	Consultancy to assist with Water Regulations 2008 Category 6 data delivery to the Bureau.	2008-09 and 2009-10	Approx \$200,000	Direct Source	No

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 77

**Output:** 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Weather Stations

Hansard Page ECA: Written Question on Notice

# Senator Birmingham asked:

- 1. Will any weather stations be closed? If so, can a detailed breakdown of which stations will be closed and when please be provided?
- 2. Will there be any new Doppler Radars funded in Australia? In particular, will there be a Doppler Radar funded in Western NSW?

- 1. No.
- 2. The Bureau of Meteorology currently has no plans to fund new Doppler radars in Australia.

Answers to questions on notice

# **Environment, Water, Heritage and the Arts portfolio**

Additional Estimates, February 2009

Outcome: 1 Question No: 78

Output: 1.1

**Division/Agency:** Bureau of Meteorology

**Topic:** BoM – Climate Change Research

Hansard Page ECA: Written Question on Notice

# **Senator Birmingham asked:**

- 1. How much funding was given to the Bureau of Meteorology for research into climate change in 2008?
- 2. How much funding will be given to the Bureau of Meteorology for research into climate change in 2009?

- 1. \$920,000\*
- 2. \$770,500\*

<sup>\*</sup> Figures are only available for financial years and are for (1) 2007/08; and (2) 2008/09.