

**Interim Independent Expert Scientific Committee on Coal Seam Gas and Coal Mining  
Minutes – Meeting 3, 26 March 2012**

**MINUTES – Meeting 3  
Monday, 26 March 2012**

The Boathouse by the Lake, Menindee Drive, CANBERRA

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**Attendance and Apologies**

**IN ATTENDANCE**

Professor Craig Simmons (Chair)  
Ms Jane Coram  
Emeritus Professor Peter Flood  
Professor Chris Moran (until 1.00pm)  
Professor John Langford  
Associate Professor David Laurence

**APOLOGIES**

Nil

**SECRETARIAT AND SUPPORT STAFF**

Alex Rankin  
Malcolm Forbes  
Bernadette O'Neil  
Angus Cole  
Pamela Finger  
Helen Vooren

**GUESTS AND OTHER DEPARTMENTAL STAFF**

Angus Cole (Office of Water Science)	Mark Hall (Environmental Assessment and Compliance Division)
Peter Baker (Office of Water Science)	Lisa Van Vucht (Environmental Assessment and Compliance Division)
David Jones (Office of Water Science)	Amanda Matley (Environmental Assessment and Compliance Division)
Troy Casey (Office of Water Science)	David Calvert (Environmental Assessment and Compliance Division)
Fiona Beynon (Office of Water Science)	Terri English (Environmental Assessment and Compliance Division)

As there was a quorum the meeting commenced at 8.25 am.

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**Welcome & Introductions**

The Chair welcomed committee members, the Secretariat (provided by the Office of Water Science) and departmental staff and noted the request from Professor Chris Moran to be excused from the meeting at 1.30pm as he has pressing University business. Ms Jane Coram joined the meeting at 8.50am.

**1. Standing Items**

**1.1. Conflicts of Interest**

1.4.1 Committee members completed the Conflict of Interest Register at Attachment A.

**1.2. Acceptance of minutes from previous meeting**

1.2.1. The Interim Committee endorsed the structure and content of the minutes and the Chair signed off the minutes as a true and accurate record of the previous meeting.

**1.3. Action items report**

1.3.1. The Action Arising report was noted.

1.3.2. Committee members were provided with a hardcopy of Professor Moran's proposed desktop review of bioregional assessments in hardcopy as noted in Action Item 220212-2.

1.3.3. An update was provided on progress with Action Item 220212-9. Ms Rankin advised that the field trip proposal had been raised with state officers in Queensland and would also be raised with New South Wales state officers next week. The necessity of undertaking the field trips was stressed.

1.3.4. The request to extend Action Item 220212-10 was granted. The development of the 'model' terms of reference relating to EIS documents will now be provided to the May meeting.

**1.4. Out-of-Session decisions**

1.4.1. All Out of Session items were noted.

1.4.2. The draft Probity Plan was discussed and suggestions made for changes to reduce ambiguity. In Attachment D on Stakeholder Consultation Protocols, it was noted that committee members were explicit about their role in declaring or accepting stakeholder invitations. The definition of the Task needs to be refined to clearly specify the nature of 'Tasks' that are sensitive (e.g. decisions on projects)

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***Action Arising***

**260312-1** Office of Water Science to review the Consultation Protocols at Attachment D of the draft Probity Plan to reduce ambiguity. Reviewed draft to be circulated out of session.

1.5. Correspondence

1.5.1 The Interim Committee noted the Correspondence.

***Action Arising***

**260312-2** Whilst the Chair has a copy, correspondence from the Minister received after preparation of the meeting papers to be circulated to the Committee.

**260312-3** The Crib Sheet for Sitting Fees is circulated to all committee members.

1.6. Communications

1.6.1. The Interim Committee noted the media analysis provided by Public Affairs for the period for February to March 2012. The Committee commented on the value of this report and requested to continuation of the daily media clips distribution as well as the monthly media analysis. Additionally where media items directly mention the committee that should be noted in the daily media clips email.

***Action Arising***

**260312-4** Daily media clips distribution as well as the monthly media analysis to continue.

**260312-5** Media items that directly mention the committee to be noted in the daily media clips email.

1.6.2. It was agreed that no further action be taken on the proposal to establish an open call for research projects due to funding, procurement and intellectual property constraints.

1.6.3. A discussion followed on the development of the website and options for receiving comments, proposals and ideas from stakeholders. The Office of Water Science was requested to prepare a fact sheet and / or statement for the website outlining the Committee's operating principles and clearly explaining how the committee will engage with stakeholders.



**Action Arising**

**260312-6** The Office of Water Science to prepare a fact sheet and / or statement for the website that outlining the committee's operating principles and clearly explaining how the committee will engage with stakeholders.

**RESEARCH AND STRATEGIC FRAMEWORK**

**2. Strategic Framework**

**2.1. Strategic Framework**

- 2.1.1. Decision on the strategic framework was deferred to allow Professor Simmons and Ms Coram to work off line with the Office of Water Science on development. The draft document including diagrams to be circulated out of session for comment.

**Action Arising**

**260312-7** Development of the strategic framework to be progressed by Professor Simmons and Ms Coram with the Office of Water Science.

**260312-8** The draft document to be circulated out of session for comment.

**2.2. Progress of the Request for Tender**

- 2.2.1. A verbal report was provided by Ms Finger on the progress of the recently closed Request for Tender process to establish a panel arrangement of scientific and technical experts to provide research services on the impacts of coal seam gas and coal mining on water. The evaluation process is underway and it is expected to be completed by Easter.

A list of the panel members was requested once the evaluation process is complete. The skills and services matrix will be provided detailing the panel members in each quadrant.

**Action Arising**

**260312-9** A list of panel members is provided once the evaluation process is complete showing the types of services panel members have been selected for and providing details of key research personnel nominated.

### 3. Bioregional assessments

#### 3.1. Workshop 2 Outcomes – Adopting a framework for bioregional assessments and operational models for delivering bioregional assessments

- 3.1.1. The general impressions gained of the Bioregional Assessments workshop recently held in Sydney were discussed. It was noted that one of the recurrent questions was 'Who is going to use the assessment?'  
The draft workshop outcomes report was tabled.

A framework for bioregional assessment, based on the outcomes of the Sydney workshop, was adopted with changes and the Office of Water Science was requested to prepare a methodology paper taking into consideration and linking to the strategic framework document under preparation.

#### **Action Arising**

**260312-10** Office of Water Science will prepare a methodology paper, with consideration of and linking to the strategic framework document under preparation. (Refer 260312-7)

- 3.1.2. The requirement to consider options for governance arrangements for delivering (a) bioregional assessments and (b) research projects was noted. These regions may require more definition at a lower level when information becomes available from additional work being undertaken at Agenda Item 3.3. The Minister's decision to allocate \$9.2million for initial activity areas relevant NRM regions in New South Wales and Queensland was noted. Further discussion was deferred to Item 4.1.

#### 3.2. Initial 5 priority regions

- 3.2.1. The Ministerial announcement of the five regions for the first bioregional assessments was discussed and noted. These regions may require more definition at a lower level when information becomes available from additional work being undertaken by larger scale projects.

- 3.2.2. Advice was deferred on scheduling work within the larger bioregions. General consensus was to wait until the final report from Geoscience Australia rapid regionalisation project was available to inform considerations.

It was also noted that once this report was available, the Interim Committee may request the Minister to add additional regions to the priority areas for assessment.

- 3.2.3. The preliminary scope of work for each of the first bioregional assessments was agreed. It was noted that a 'bus stop' approach should be adopted in

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delivering each of the assessments to ensure performance can be adequately assessed. It was agreed that an allocation of \$5 million in the 2011-12 financial year was more appropriate with a significantly reduced allocation in 2012-13 to permit a 'bus stop' review by the ongoing committee in August 2012.

3.2.4. A series of projects were discussed and it was suggested the Office of Water Science incorporate the following into the bioregional assessment process all of which can be run in parallel.

- Project 1 – Develop methods for bioregional assessments.
- Project 2 – Investment in conceptualisation of water models and supporting data.
- Project 3 – Five regions gap analysis of the water asset and values data based on the conceptual model and tested.
- Project 4 – Development of a Hazard register (effects of coal seam gas and coal mining on the water balance)
- Project 5 – Development of an Assets list for each region as per the Minister's allocation of \$9.2 million in New South Wales and Queensland
- Project 6 – Representation of Vulnerabilities – what does it look like and how will it be used.

Funds for these projects would come from the agreed allocation.

**3.3. Consideration of Geoscience Australia's priority regions report**

3.3.1. The recommendations of the draft Geoscience report were discussed and it was noted that Geoscience Australia had been requested by the Office of Water Science to undertake further work on the table attachments incorporating new data sets available.

The Interim Committee discussed the possible inclusion of areas including the Galilee, Gunnedah, Condamine, Fitzroy & Arckaringa Basins however deferred any recommendation until the final report was received.

***Action Arising***

**260312-11** Geoscience Australia report to be circulated out of session to inform consideration of the inclusion of other areas in the priority area group.

**4. Research Projects**

**4.1. Status of projects previously recommended by the Committee**

4.1.1. Mr Forbes provided an update on the progress of projects and funding commitments to date. The progress on projects was noted. The escalation of funding costs for the proposed project - *National assessment of chemicals used*



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*in hydraulic fracturing and of contaminants arising from coal seam gas was questioned.*

As final scope and costing for the above project are due for approval by mid April, it was suggested that a staged assessment approach be taken with the first stage being a literature review concentrating particularly on fracking chemicals used internationally and which may or may not be considered for use in the Australian geological environment. Updates were requested on this project as it is progressed.

***Action Arising***

**260312-12** Update requested on progress of the project - *National assessment of chemicals used in hydraulic fracturing and of contaminants arising from coal seam gas.*

4.1.2. The following institutions were suggested as having potential skills for undertaking critical literature reviews of science related to coal seam gas and coal mining.

- University of NSW (School of Mining and other Departments)
- Queensland University / Sustainable Minerals Institute
- Geoscience Australia
- Centre for Petroleum Studies (SA)
- CSIRO

It was suggested that any model for delivery should include an oversight role which would ensure a consistent approach and suggested that an option may be the involvement of a lead editor with other areas / organisations approached to undertake specific work.

**4.2. New Projects**

4.2.1. The list of priority knowledge projects based on the seven priority areas identified at the Brisbane workshop and confirmed at the informal March meeting was discussed.

Following list of projects were supported by the committee for further consideration.

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Project Title
1.1 Comparison of modelling approaches
1.2 Strategic acquisition of remotely sensed optical and radar imagery
2.1 Monitoring and managing bore (water and gas) integrity against leakage
3.1 Hydraulic properties of aquifer geology
3.2 Monitoring of geochemical and isotopic characteristics of geochemical waters
3.3 Managing the subsidence impact of aquifer drawdown's due to coal seam gas extraction and long wall coal mining
4.1 Field survey of EPBC listed Great Artesian Basin fed springs
4.2 Coal Basin scale aquatic ecosystem monitoring
5.1 Managing coal seam gas co-produced water

Two potential priority projects from Victoria were discussed and it was noted that they were not directly related to existing coal seam gas or coal mining. Whilst these projects were considered of value in their own right, Victoria would need to co-invest in these projects rather than have the Commonwealth as the sole investor.

**Action Arising**

**260312-13** Project 1.2 - *Information platform to support bioregional assessment of Australia's major coal basins*. Circulate project proposal out of session

**Advice on Projects referred by Governments**

**4.3. Projects referred by the Department of Sustainability Environment Water Population and Communities**

The committee commenced with a broad ranging discussion on the quantity and format of the large volumes of information that are being provided as attachments for items for consideration. Clarification was provided on the independence of the Office of Water Science from the regulatory role of the Department under the EPBC Act. The Office of Water Science role in focussing the requests for advice around water issues rather than on matters of national environmental significance was also acknowledged.



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When projects are referred for consideration, it was noted that the Office of Water Science may prepare draft advice for consideration. The individual expertise of committee members is to be drawn on to formulate draft advice. In addition advice may be obtained from other agencies to inform items of consideration before the Committee.

In addition to the written advice and supporting documentation, a focussed presentation from Environmental Assessment and Compliance Division was requested. The Office of Water Science to provide supplemental briefing on the water impacts of the proposal.

***Action Arising***

**260312-14a** In addition to the written advice and supporting documentation, a focussed presentation from Environmental Assessment and Compliance Division was requested.

**260312-14b** The Office of Water Science to provide supplemental briefing on the water impacts of the proposal.

The Interim Committee discussed three requests for advice on specific development proposals referred by the Environmental Assessment and Compliance Division of the Department of Sustainability, Environment, Water, Population and Communities.

- Apex Illawarra Coal Seam Gas Exploration Drilling and Gas Monitoring Project
- Sonoma Mine Management Pty Ltd – Diversion of a stretch of Coral Creek
- Codrilla Coal Mine Project.

4.3.1. The committee discussed the Apex - Illawarra Coal Seam Gas Exploration Drilling and Gas Monitoring Project noting that only 2 of the 16 test holes to be drilled were considered to be of concern. It was also noted that this exploration drilling was also to be undertaken within the Sydney water catchment.

State approval was already granted and included water provisions. The project was approved by the New South Wales government on the information provided noting that there was a strong flora and fauna focus. It was also noted that the New South Wales Government may wish the Committee to review the water provisions in the future. The committee was of the view that the project would have minimal impact on the water resources.

4.3.2. The committee discussed the Sonoma Mine Management Pty Ltd – Diversion of a stretch of Coral Creek project noting the issues of creek bed stability and

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the scale of the water impacts. The impact of the removal of trees in the riparian zones was questioned as was modelling of the stream diversion.

Advice was deferred on the Sonoma project and additional hydrological information was requested. Office of Water Science will prepare draft advice for consideration out of session.

***Action Arising***

**260312-15** Office of Water Science to request additional hydrological information (Appendices from the Report for Coral Creek Diversion) to inform draft advice for circulation out of session.

4.3.3. The Interim Committee discussed the Codrilla Coal Mine Project noting that the state government had approved the project with conditions relating to surface and groundwater. This is a large coal mine development in the Fitzroy Basin where there are significant numbers of developments and applications. The cumulative impacts to the ground and surface water of these types of applications may be of some concern. It was also noted that the area is subject to flooding and questioned whether flood modelling had been done on this project.

Advice was deferred on the Codrilla project. The groundwater studies undertaken for the project to be circulated out of session. Office of Water Science to prepare draft advice for consideration out of session.

***Action Arising***

**260312-16** Office of Water Science to request groundwater studies documentation for the Codrilla project and circulate out of session.

**260312-17** Office of Water Science to prepare draft advice for consideration out of session.

**4.4. Future referrals under the EPBC Act**

4.4.1. It was noted that there are four projects likely to be referred for advice in April.

4.4.2. The limitations of anticipating the EPBC Act project workloads were noted as were the limitations for anticipating the expected referrals from state governments.

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4.4.3. The Office of Water Science will establish mechanisms and protocols to outline the information requirements of the committee when considering states projects. Issues raised for consideration include:

- Committee to review at draft EIS stage
- Need ground water and surface water context
- Cumulative impact of multiple projects. – How is this information captured and mapped.

***Action Arising***

**260312-18** For the May meeting – a draft State Referral Protocol will be provided for consideration.

**5. Budgetary implications of project commitments**

**5.1. Budgetary implications of project commitments**

5.1.1. Potential funding commitments were noted, including potential implication for the 2012-13 budgets of the currently anticipated budget profile.

5.1.2. The Office of Water Science will seek a review of the commissioned projects at the statutory committee's meeting in August to assess whether these projects meet ongoing priorities and to allow a review of funding commitments.

***Action Arising***

**260312-19** For the August meeting – a review of the commissioned projects against the strategic framework and ongoing priorities and to review funding commitments.

**Next Meeting**

The next meeting will be held on 18 April 2012 in Canberra (venue to be confirmed).

The meeting closed at 5.40pm

Minutes confirmed as true and correct:



Professor Craig T. Simmons  
Committee Chair

April 2012





### ATTACHMENT A: Meeting 3 disclosure of interests

Item	Committee Member	Disclosure	Determination
2.1	Ms Jane Coram	Draft Strategic Framework: Geoscience Australia is a potential provider for work identified under the Framework	Participation in discussion only.
3.1	Ms Jane Coram	Framework for Bioregional Assessments: Geoscience Australia is a potential provider	Participation in discussion only.
3.3	Ms Jane Coram	Geoscience Australia Report: Geoscience Australia was the head agency performing the work.	Participation in discussion. No decision required.
4.2	Associate Professor David Laurence	Proposed research project: Mining beneath peat swamps. University of NSW is a potential provider.	Participation in discussion only.
4.2	Professor Craig Simmons	Proposed research projects: National Centre for Groundwater Research and Training is a potential provider.	Participation in discussion only.

