

ASEG 2012 22nd ASEG International Conference and Exhibition News Update (07)



The COC is pleased to announce that BHP Billiton has come on board as the Platinum Sponsor. While the company hardly needs any introduction it is worth noting their continued and continuing support for both our society and our profession.

We are now only 5 months out from the conference with Early Bird registration to close on 15 November. At the time of writing, the Technical Committee is extremely busy reviewing nearly 200 abstracts. Thanks to all those who volunteered (and those who didn't but are doing it anyway).

In a departure from previous conferences we will be giving extended time to more keynote speakers. The workshop programme will include opportunities for geophysicists at every stage of their career. The provisional list of Conference Workshops to take place on either Sunday 26 February or Thursday 1 March 2012 is listed below. You can register your interest on the website (see below).

Petroleum/Energy

- AVO Inversion by Brian Russell
- Operational Seismic Sequence Stratigraphy by Robert Kirk
- Microseismic Monitoring by Peter Duncan
- Geothermal Exploration by Cameron Huddleston
- Coal Bed Gas by Scott Thompson
- Seismic Imaging: A Review of the Techniques, their Principles, Merits and Limitations by Etienne Robein (EAGE Education Tour)
- A Practical Overview of Seismic Dispersion by Chris Liner (SEG DISC)

Minerals

- Electromagnetics by Douglas Oldenburg
- Natural Electromagnetic (Magnetotelluric) by Bob Smith

Industrial workshops on Minerals (presenters to be confirmed)

- Intrepid Geophysics
- Mira Geoscience
- Ikon Science

Last but not least, the social programme has been finalised with the traditional ice-breaker and conference dinner being the highlights. The exhibition area, scene of many past pleasures, will be full again as only 13 booths remain to be sold.

If you have a corporate conference or local geological/geophysical meeting I ask that you help promote ASEG2012. A PowerPoint slide, conference poster and conference email signature are all available to download in the media area of the website.

Please visit our website at www.aseg2012.com.au.

Co-Chairs: Wayne Mogg and Andrea Rutley

Technical: Binzhong Zhou

Sponsorship: Ron Palmer

Exhibition: John Donohue

Finance: Noll Moriarty

Workshops: Koya Suto

Publicity: Henk van Paridon

Social: Janelle Kuter

Henk van Paridon

Outstanding Plenary Program arranged for 34th IGC in Brisbane



The 34th IGC Scientific Program will feature a daily Plenary Session in which distinguished speakers will give invited presentations on major contemporary themes in the geosciences. These plenary themes are closely aligned with particular Themes and Symposia in the scientific program and are intended to promote discussion and debate during the Congress.

1. The Earth and man: living with a restless Earth

An increasing proportion of the world's population, especially in developing countries, are potentially at risk from natural hazards. This plenary will

examine how man's interaction with the Earth's natural processes has shaped human society and how man has adapted to living in close proximity to natural hazards such as volcanoes, earthquakes, tsunami and floods.

Iain STEWART (UK) – A geologist and broadcaster who holds a chair in Geoscience Communication at Plymouth University. A well known presenter of several major BBC television series about the planet (*Journeys from the Centre of the Earth; Journeys into the Ring of Fire; Earth: The Power of the Planet; Earth: The Climate Wars, How Earth Made Us*). His latest landmark BBC series examines how plants have helped shape Earth's history.



Renato SOLIDUM Jr (Philippines)

– Director of the Philippine Institute of Volcanology and Seismology, the Philippine government organization mandated to monitor and warn, assess hazards and risk, conduct research and development, and formulate awareness and preparedness plans to events related to volcanoes, earthquakes and tsunami.

2. What does the geological record tell us about the Earth's past climates in relation to projected climate change?

This plenary will overview the current data and projections relating to global climate change and examine the evidence

from the geological record of past climate change. It will consider rates of climate change, sea levels, CO₂ levels and temperatures, geosphere–biosphere feedbacks and climate sensitivities, and explore what this might mean for the Earth's climate in the future.

Tim NAISH (New Zealand) – Director of the Antarctic Research Centre at Victoria University of Wellington and Principal Scientist at the New Zealand Crown Research Institute, GNS Science. He is a paleoclimatologist focussed on reconstructing past global sea-level changes from continental margin geological records and participated in 9 expeditions to Antarctica and helped found ANDRILL, an international Antarctic Geological Drilling Program.

Will STEFFEN (Australia) – Executive Director of the ANU Climate Change Institute at the Australian National University (ANU), Canberra and serves on the Multi-Party Climate Change Committee (MPCCC) and as a Climate Commissioner. His research interests span a broad range within the fields of climate change and Earth System science, with an emphasis on incorporation of human processes in Earth System modelling and analysis.

3. Energy in a carbon-constrained world

The plenary will review the drivers for change to a low-carbon energy future and examine the range of energy sources potentially available but with particular focus on the geo-sources of energy (fossil fuels, geothermal, nuclear, hydro). It will consider the resource base, accessibility, extraction and use, technological and other limitations, and the environmental impacts of use of the various energy sources available now and the in the medium term.

Lord Ron OXBURGH (UK) – Member of the House of Lords UK Parliament, served as chairman of The Shell Transport and Trading Company until its unification with Royal Dutch Petroleum, and a graduate of the Universities of Oxford and Princeton. He has taught geology and geophysics at the Universities of Oxford and Cambridge

and was a visiting professor at Stanford University, the California Institute of Technology and Cornell University.

Scott TINKER (USA) – His passion is education. He is actively engaged in building bridges between academia, industry and government. His latest educational project is a major documentary film on global energy. Scott has developed a vision for America's energy future and concludes that energy security – available, affordable, reliable and environmentally sustainable – must drive energy policy.

Sally BENSON (USA) – Director of the Global Climate and Energy Project in the Department of Energy Resources Engineering at Stanford University. She has worked at Lawrence Berkeley National Laboratory in a number of capacities, including Division Director for Earth Sciences. She was a coordinating lead author on the 2005 Intergovernmental Panel on Climate Change Special Report on Carbon Dioxide Capture and Storage.

4. Resourcing tomorrow: meeting the needs of a growing population

This plenary will review the future demand and availability of groundwater and mineral resources. By 2050 the world's population will exceed 9 billion with well over half living in urban areas. This will require more natural resources, especially minerals, energy and water, than used in the past, and present challenges for the discovery of resources and new extraction technologies.

Leader of Chinese Delegation – Future resource demand: a perspective from China.

Eduardo LEDSHAM (Brazil) – Vale's Executive Director for Exploration, Energy and Projects Management. He is the Chairman of the Board of two energy companies: VSE and VEL. He developed his professional career at Vale, which he joined in 1986.

Steve GORELICK (USA) – Runs the Global Freshwater Initiative at Stanford University where he is the Cyrus F. Tolman Professor in the Department of

Environmental Earth System Science. One of his major research focus areas is analysis of water-supply sustainability in developing nations, including multi-year projects that have evaluated urban-agricultural competition for surface water and groundwater resources.

5. Digital Earth – The information explosion

The digital revolution and explosion of information is shaping the future direction and application of the earth sciences. Rapid advances in real time monitoring and measurement, web technologies and in data transfer are making geological and geospatial data increasingly global, accessible and instantaneous and therefore useful for purposes beyond which they were originally collected.

Thomas CUDAHY (Australia) – Director of the Western Australian Centre of Excellence for 3D Mineral Mapping. He has over 25 years of research experience with CSIRO in Perth in developing optical remote and proximal technologies for mineral resources exploration and development, especially hyperspectral mineral mapping at visible to thermal infrared wavelengths.

Laura WALLACE (New Zealand) – Senior Scientist at GNS Science in, New Zealand. Her primary research interests are in using GPS techniques to understand tectonic processes. In particular, she applies GPS methods to gain new insights into slow slip events at subduction zones, tectonic geohazards and plate boundary zone deformation.

Kristine ASCH (Germany) – Head of the Geological Information Systems and Maps unit at the Federal Institute for Geosciences and Natural Resources. She is Chair of the IUGS Commission of Geoscience Information, leads the Europe Subcommission of the Commission of the Geological Map of the World and coordinates building the Geoscience Information in Africa (GIRAF) network.

For more information, go to the IGC website: www.34igs.com.

David Denham

National Rock Garden: Celebrating the Geological Heritage of Australia

Concept

Australia's prosperity over the past 200 years has depended substantially on the geological makeup of the continent and its margins. This economic dependence on the continent's geological legacy is likely to continue well into the future. It therefore seems appropriate that due recognition be given to Australia's geological heritage by establishing a tribute in the nation's capital, Canberra, alongside other national monuments and institutions.

Displays of specimen rocks are established in a number of locations around the world; examples include the exhibition sites in St Johns, Canada, and the Science Museum in Helsinki, Finland. The latter is the example that spawned the present project following the 2008 International Deep Seismic Profiling Symposium at Saariselkä well inside the Arctic Circle. The Finns take great pride in displaying the richness of their spectacular glaciated Precambrian geology and its resources. This geological heritage is there for all to see in parks in the middle of Helsinki. Australia has an even greater reason to recognise and celebrate its geological legacy.

After consideration of a discussion paper among members, the Geological Society of Australia (GSA) adopted the concept of a national rock specimen display in the form of a park/garden in Canberra containing specimens from around the country. It is believed that such a display of rock specimens from across a whole continent will be a world first. The rock

garden/park will be open to the general public and demonstrate the richness and diversity of Australian geology in every State and Territory.

It is proposed that this Australian tribute takes the form of a National Rock Garden on the north-western shores of Lake Burley Griffin, Canberra (see Figure 1). In a very real sense the National Rock Garden will bring together elements from every corner of the country.

A site has been gazetted by the Commonwealth Government and will share infrastructure such as roads, amenities blocks, pathways, shelters, car and bus parking with the neighbouring Lindsay Pryor National Arboretum currently being redeveloped as a tourist and educational destination by the National Capital Authority (NCA).

The 6 hectare site of the National Rock Garden is currently gently sloping grassland (see Figure 2), ideal for the development of pathways, rock specimen sites and public amenities. There are views from the site towards Lake Burley Griffin and Black Mountain. It is expected that there will be a central focal point, explanatory geological information and amenities for tourist and educational purposes. Construction of the entrance driveway from traffic lights on Lady Denman Drive by the ACT Government is now nearing completion.

Rock specimens

National Rock Garden specimen rocks will be selected on the basis of criteria

that reflect the project aims, namely, to recognise, acknowledge and celebrate Australia's rich geological heritage and demonstrate to present and future generations of Australians the diversity of the rocks and minerals that contribute so significantly to the nation's landscapes, heritage and prosperity.

Rock specimens will be large (10–20 tonnes), realistically collectable, sufficiently robust for transport and long-term survival in the Canberra environment, and they must meet more than one of the following selection criteria.

- **Educational value and public/tourist interest** – Specimens must be inherently interesting to the public and of significant educational value.
- **Nationally recognised/iconic** – Specimens should be readily associated with nationally significant locations, or cultural, industrial, economic or scientific heritage.
- **Story line/history** – Specimens should have a fascinating story to tell vis-a-vis Australian social history, scientific interest, industrial/economic importance and indigenous cultural tradition.
- **Interest/appearance** – Specimens should have an intrinsically interesting rock type, shape, colour or texture. The collection must include a balance of rock types, age, resources and structures, covering the length and breadth of the continent.

Specimens, where possible, will have a face cut and polished to reveal internal colours, textures and structures.



Fig. 1. Map image of western Lake Burley Griffin, Government House and the Scrivener Dam showing the location of the National Rock Garden site.



Fig. 2. The National Rock Garden site looking towards central Canberra and the Captain Cook Memorial Fountain on Lake Burley Griffin.

Gathering 15–20 tonne rock specimens from around the continent is going to be hard job. Just getting agreement on a representative collection of 100 specimens is going to be hard too. However, GSA has established working groups in each State and Territory to help with this task.

Landscape design

In the first half of 2011 the GSA combined with the University of Canberra



Fig. 3. Design concept by University of Canberra student Louise Thomassin with pathway networks for rock specimens within different geological periods.

to sponsor a landscape design competition for 27 3rd year students including four scholarship students from Canada. Some excellent designs and ideas were produced that may well be incorporated in a final professional design within the next six months (see Figure 3 for an example).

National Rock Garden Trust

The GSA still has a long way to go in the business of constructing the National Rock Garden. Serious sponsorship funding is being sought from industry, governments and institutional organisations. The Society is entered on the Register of Environmental Organisations and is therefore endorsed by the Australian Taxation Office as a Deductible Gift Recipient. A National Rock Garden Trust has been established. The National Rock Garden Steering Committee includes representatives from Geoscience Australia, Questacon, the National Museum of Australia and the Australian Geoscience Council helping the GSA. Let's hope we can transform this National Rock Garden concept into reality in the next few years.

ASEG help and assistance

The Geological Society welcomes the support for the concept received from the Australian Society of Exploration Geophysicists (ASEG). ASEG members can help by being proactive in 'spreading the word' among colleagues throughout the resource industry, government and institutions. In Canberra we see many examples of monuments and memorials to many aspects of Australia's social history. Let's now also demonstrate to the world the richness of Australia's natural history and geological foundations and how they have shaped human history on this continent. This project presents a golden opportunity for the resource industries, governments, institutions and individuals to sponsor an outstanding national tribute to the basis of Australia's prosperity and social history.

Doug Finlayson
GSA and ASEG Member
Member of the National Rock Garden Steering Committee

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Daishsat helicopter crashes in WA

The ASEG community was saddened to learn of the recent crash of a Daishsat Robinson R44 helicopter at Mingah Springs Station, about 200 km north of Meekatharra in Western Australia. The crash on Saturday 3 September claimed the life of 37-year-old pilot Matthew Wilson. The 23-year-old operator, Hugh Caren from Ireland, suffered serious injuries but is said to be recovering well.

The helicopter was undertaking a gravity survey as part of the continuing program of geophysical data collection under the

Exploration Incentive Scheme in Western Australia. The Australian Transport and Safety Bureau is investigating the crash, but the investigation will not be complete before July 2012.

Matthew Wilson was a contract pilot for Daishsat. Managing Director David Daish said, 'Matt was a highly experienced pilot who first flew solo in an aircraft at 11 years of age. His skill and professionalism were greatly admired by his colleagues on the survey. He will be sadly missed by all who knew him.'

Hugh Caren is a graduate of the University of Dublin and has been working for Daishsat for four months. 'Hugh survived the crash and is recovering well – despite multiple fractures and internal injuries his first words to me immediately after the accident were "I think I'm ok" – they must breed them tough in Ireland', said David Daish.

The ASEG extends its warmest sympathy to Matthew Wilson's family and wishes Hugh Caren well in his continuing recovery.

Join a leading Australian university

Assistant Professor (REF: 3713) **(GOODEVE LECTURESHIP IN GEOPHYSICS)** **SCHOOL OF EARTH AND ENVIRONMENT**

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The School of Earth and Environment is one of the strongest groupings of geoscientists in Australia, with interests in both fundamental and applied earth sciences. This position has been established within the School to honour the achievements of Peter Goodeve, one of Australia's leading geophysicists, and aims to further strengthen geosciences.

The successful applicant must have a PhD in geoscience and experience in using geophysics to address geological questions relevant to mineral, petroleum or groundwater resources. The role requires close collaboration with other geoscientists involved in applied earth science research. The incumbent will be expected to conduct research at the highest level and apply for external research funds from academic and industry sources. The appointee will also be expected to engage in undergraduate teaching and postgraduate supervision. Applicants with teaching experience are requested to submit a teaching portfolio as part of their application.

For further information regarding the position please contact Winthrop Professor Mike Dentith on (08) 6488 2676 or email michael.dentith@uwa.edu.au.

Benefits include 17% superannuation, generous leave provisions and fares to Perth (if applicable) for appointee and dependants along with a removal allowance. These and other benefits will be specified in the offer of employment.

Application Details: For copies of the position description please access the website <http://jobs.uwa.edu.au/>. Written applications quoting the reference number, personal contact details, qualifications and experience, along with contact details of three referees should be sent to Director, Human Resources, The University of Western Australia, M350, 35 Stirling Highway, Crawley WA 6009 or emailed to jobs@uwa.edu.au by the closing date.



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Takeovers by giants continue

Rio Tinto acquires Riversdale Mining

Riversdale Mining Limited, with a market capital of approximately \$4 billion was removed from the official list of the ASX on 7 July 2011, following the compulsory acquisition by Rio Tinto Jersey Holdings 2010 Limited.

Riversdale's main operations were in Africa, with three major coal projects. These are:

1. **Benga Project** in Mozambique, which is a joint venture between Riversdale (65%) and Tata Steel Limited (35%). Identified on the Benga Licence are coal resources of 4.0 billion tonnes and a coal reserve of 502 million tonnes. Construction of Stage 1, which will produce an estimated 5.3 Mt per year, has started and is expected to be completed in the second half of 2011.

2. **Zambeze Project**, also in Mozambique, has an estimated coal resource of 9 billion tonnes. It is similar in structure to Benga with 22 coal seams outcropping over a strike length of 14 km across the northern portion of the tenement. Riversdale was negotiating with Wuhan Iron and Steel Corporation and the China Communications Construction Company to development the Zambeze Project.

3. **Zululand Anthracite Colliery**, in South Africa, which is an operating underground anthracite mine located in the Zululand coalfield of northern Kwa-Zulu Natal. The 'run of mine' coal production was 753 433 tonnes for the year ended 30 June 2010. It has an estimated mine life of 13 years.

This is another strategic acquisition by Rio Tinto, to provide access to the Chinese coal market.

Barrick Gold swallows Equinox

Equinox Minerals Limited, with a market capital of approximately \$7 billion, also vanished from the ASX in July 2011, when it was compulsorily acquired by the Canadian giant Barrick Gold Corporation. Equinox was an international mining company, dual listed in Canada and Australia. Its main interests were operating its 100% owned large scale **Lumwana copper mine** (20 million tonnes of ore per year) in Zambia, one of the largest new copper mines to be developed globally over the past decade and the construction of the **Jabal Sayid Copper-Gold** project in Saudi Arabia.

This is another example of giant multi-nationals swallowing not-so-small companies operating in Africa. Does this indicate a long term decline in business for the ASX in the resources sector?

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Update on Geophysical Survey Progress from the Geological Surveys of Queensland, Western Australia, New South Wales, Tasmania and Geoscience Australia (information current at 19 September 2011)

Tables 1–3 show the continuing acquisition of gravity, airborne magnetic and radiometric data, and airborne electromagnetic data over the Australian continent.

Current surveys are in New South Wales, Queensland, Tasmania and Western Australia. All surveys are being managed by Geoscience Australia.

This issue reports three new gravity surveys in the Eucla Basin of Western Australia (see Figure 1). The three surveys will collect 14 703 gravity readings on a 2.5 km regular grid.

Table 1. Airborne magnetic and radiometric surveys

Survey Name	Client	Contractor	Start flying	Line (km)	Spacing AGL Dir	Area (km ²)	End flying	Final data to GA	Locality diagram (Preview)	GADDS release
South Officer 1 (Jubilee)	GSWA	Thomson	1 Jun 10	180 000	200 m 50 m N–S	32 380	100% complete @ 22 Jun 11	TBA	148 – Oct 10 p23	TBA
South Officer 2 (Waigen – Mason)	GSWA	Thomson	28 Jun 10	113 000	400 m 60 m N–S	39 890	100% complete @ 5 Jan 11	TBA	148 – Oct 10 p24	QA/QC of final data in progress
North Canning 4 (Lagrange – Munro)	GSWA	Aeroquest	20 Sep 10	103 000	400 m 60 m N–S	36 680	100% complete @ 23 Jun 11	TBA	148 – Oct 10 p26	TBA
Grafton – Tenterfield	GSNSW	GPX	16 Jun 11	100 000	250 m 60 m E–W	23 000	58.5% complete @ 18 Sep 11	TBA	151 – Apr 11 p16	TBA
West Kimberley	GSWA	Aeroquest	29 Jun 11	134 000	800 m 60 m N–S Charney: 200 m 50 m N–S	42 000	21.2% complete @ 18 Sep 11	TBA	150 – Feb 11 p20	TBA
Perth Basin North (Perth Basin 1)	GSWA	Fugro	11 Jun 11	96 000	400 m 60 m E–W	30 000	39.0% complete @ 18 Sep 11	TBA	150 – Feb 11 p20	TBA
Perth Basin South (Perth Basin 2)	GSWA	Fugro	22 Mar 11	88 000	400 m 60 m E–W	27 500	62.5% on 18 Sep 11	TBA	150 – Feb 11 p20	Survey on hold until October
Murgoo (Murchison 1)	GSWA	Thomson	28 Feb 11	128 000	200 m 50 m E–W	21 250	58.0% complete @ 18 Sep 11	TBA	150 – Feb 11 p20	TBA
Perenjori (Murchison 2)	GSWA	GPX	TBA	120 000	200 m 50 m E–W	20 000	TBA	TBA	150 – Feb 11 p21	Expected to commence January 2012
South Pilbara	GSWA	GPX	TBA	136 000	400 m 60 m N–S	42 500	TBA	TBA	150 – Feb 11 p21	Expected to commence October 2011
Carnarvon Basin North (Carnarvon Basin 1)	GSWA	GPX	24 Jul 11	104 000	400 m 60 m E–W	32 500	54.8% complete @ 18 Sep 11	TBA	150 – Feb 11 p21	TBA
Carnarvon Basin South (Carnarvon Basin 2)	GSWA	GPX	TBA	128 000	400 m 60 m E–W	40 000	TBA	TBA	150 – Feb 11 p21	Expected to commence October 2011
Moora (South West 1)	GSWA	Aeroquest	13 Jun 11	128 000	200 m 50 m E–W	21 250	45.1% complete @ 18 Sep 11	TBA	150 – Feb 11 p22	TBA
Corrigin (South West 2)	GSWA	GPX	TBA	120 000	200 m 50 m E–W	20 000	TBA	TBA	150 – Feb 11 p22	Expected to commence November 2011
Cape Leeuwin – Collie (South West 3)	GSWA	Fugro	25 Mar 11	105 000	200/400 m 50/60 m E–W	25 000	70.2% complete @ 18 Sep 11	TBA	150 – Feb 11 p22	Survey on hold until October.

Table 1. *Continued*

Survey Name	Client	Contractor	Start flying	Line (km)	Spacing AGL Dir	Area (km ²)	End flying	Final data to GA	Locality diagram (Preview)	GADDS release
Mt Barker (South West 4)	GSWA	GPX	24 Apr 11	120 000	200 m 50 m N–S	20 000	12.7% complete @ 18 Sep 11	TBA	150 – Feb 11 p22	Survey on-hold until February 2012
Offshore East Coast Tasmania	MRT	Fugro	28 Feb 11	30 895	800 m 90 m E–W	19 570	100% complete @ 21 Apr 11	TBA	150 – Feb 11 p23	Data released via GADDS 27 July 2011
Galilee	GSQ	Aeroquest	11 Aug 11	125 959	400 m 80 m E–W	44 530	9.3% complete @ 18 Sep 11	TBA	151 – Apr 11 p15	TBA
Thomson West	GSQ	Thomson	14 May 11	146 000	400 m 80 m E–W	52 170	52.1% complete @ 18 Sep 11	TBA	151 – Apr 11 p15	TBA
Thomson East	GSQ	Thomson	14 May 11	131 100	400 m 80 m E–W	46 730	52.1% complete @ 18 Sep 11	TBA	151 – Apr 11 p16	TBA
Thomson Extension	GSQ	Aeroquest	22 Jun 11	47 777	400 m 80 m E–W	16 400	100% complete @ 10 Aug 11	TBA	151 – Apr 11 p16	TBA

TBA, to be advised.

Table 2. Gravity surveys

Survey name	Client	Contractor	Start survey	No. of stations	Station spacing (km)	Area (km ²)	End survey	Final data to GA	Locality diagram (Preview)	GADDS release
Galilee	GSQ	IMT	3 May 2011	6400	2.5 km regular	TBA	100% complete @ 10 Jul 11	TBA	151 – Apr 11 p15	TBA
Thomson	GSQ	Daishsat	1 Apr 11	7670	2.5 km regular	TBA	100% complete @ 30 Jun 11	TBA	151 – Apr 11 p15	TBA
Peak Hill – Collier	GSWA	Daishsat	29 Jul 11	9100	2.5 km regular	56 140	35.1% complete @ 3 Sep 11	TBA	153 – Aug 11 p18	TBA
Kimberley Road Traverses	GSWA	Daishsat	8 Aug 11	7560	400 m station spacing along 2700 km of gazetted roads	TBA	76.6% complete @ 11 Sep 11	TBA	153 – Aug 11 p20	TBA
Eucla Basin SW	GSWA	TBA	TBA	3798	2.5 km regular	TBA	TBA	TBA	This issue (Figure 1)	TBA
Eucla Central	GSWA	TBA	TBA	5704	2.5 km regular	TBA	TBA	TBA	This issue (Figure 1)	TBA
Eucla Basin East	GSWA	TBA	TBA	5201	2.5 km regular	TBA	TBA	TBA	This issue (Figure 1)	TBA

TBA, to be advised.

Table 3. Airborne electromagnetic surveys

Survey Name	Client	Contractor	Start survey	Line (km)	Spacing AGL Dir	Area (km ²)	End survey	Final data to GA	Locality diagram (Preview)	GADDS release
Central Australian Palaeovalley	GA	Aeroquest	End Sep 11	5000	1000 m and tie lines at 30 km	4113	TBA	TBA	152 – Jun 11 p24	TBA

TBA, to be advised.

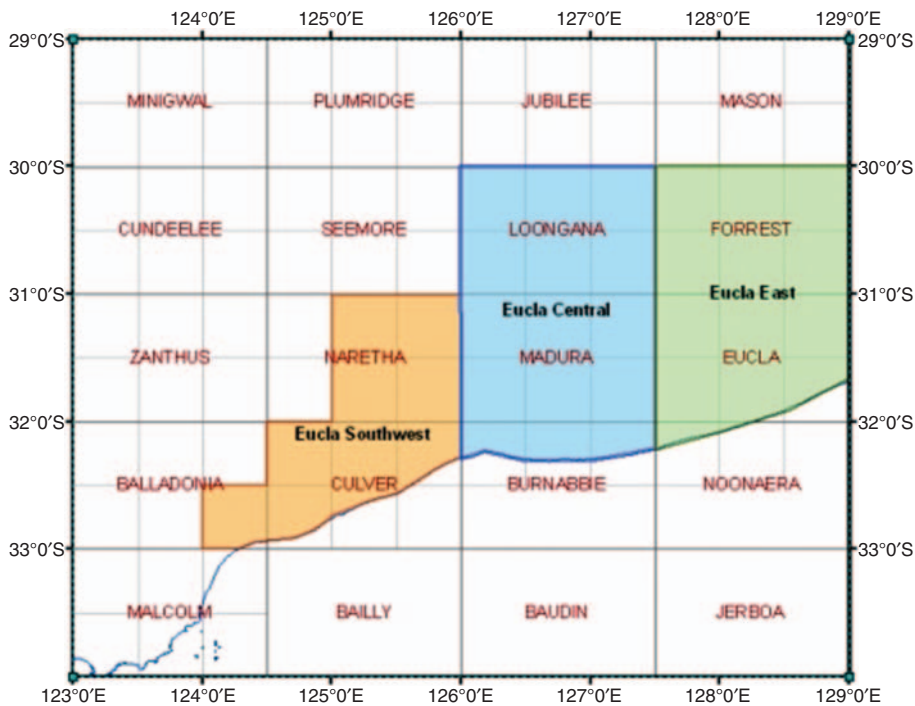


Fig. 1. Location diagram for the Eucla Southwest, Eucla Central and Eucla East gravity surveys in Western Australia.

GSQ reports that the Thomson and Galilee gravity surveys completed in July 2011 are undergoing final data checks and are now expected to be finalised in September. Gravity data will be publicly released when quality control processes are completed. Also, the Thomson and Galilee airborne magnetic and radiometric surveys are continuing in central and south-western Queensland. Wet weather delayed the start of these surveys by up to three months and data collection is now expected to continue until December 2011.



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