

# Australian Council of Environmental Deans and Directors

## Action List

Date	Action	Who
October 2011 March 2012	<p>Australian Council of Agriculture Deans ACAD and Council of Environmental Deans (ACEDD) agree to undertake joint <b>action on coal seam gas</b>:</p> <ul style="list-style-type: none"> <li>- A joint media statement (done).</li> <li>- A report on Coal Seam Gas strategic assessment and decision making process. Approach ACAD to co- fund and Dr John Williams to draft it. (p.7-8)</li> </ul>	Steve Dovers /ACAD David Gust to organise
<p>March 2012</p> <p>November 2011</p> <p>November / Dec 2011</p> <p>November / Dec 2011</p> <p>November / Dec 2011</p>	<p><b>Documentation and Analysis of Australian Environment Programs.</b> Continue with <b>fieldwork data collection</b> to get a national register, and a list of subjects that are field based or have a significant component of fieldwork. Prepare survey. Produce report for March meeting</p> <p>Prepare and pilot test a survey before sending to all the council for their input.</p> <p>ACEDD members to respond to survey monkey and provide data on field stations</p> <p>Collect statements regarding what are the minimum standards for fieldwork requirements for environmental programs. This should be considered in our TEQSA input</p> <p><b>Document scale of ACEDD portfolio</b> ACEDD members to provide ball park figures on <b>enrolments</b> and <b>research</b> which will be anonymous and through a survey monkey. (p.9-10)</p>	<p>Turton- Horsfield /Merrick</p> <p>Steve, David, Karl, Hamish to take part in pilot trial</p> <p>All ACEDD members</p> <p>All ACEDD members</p> <p>Horsfield / All ACEDD members</p>
March 2012	<p><b>TESQA background study</b></p> <ul style="list-style-type: none"> <li>- desk top review of the thinking on ALTC standards across all disciplines (particularly Geography )</li> <li>- scoping study about what kind of standards are appropriate for environment,</li> <li>- draw on the ALTC environmental engineering project process analysis (led by Julia Lamborn)</li> <li>-liaise with TESQA about ACEDD role to undertake the Environmental studies L&amp;T standards,</li> <li>- work out the best way to interact in the process and timelines. Report Lismore meeting. (p11-12)</li> </ul>	John Bailey/Turton organise project work with Richard Horsfield

Nov 2011	Discussion Paper on <b>AQF standards of PG Cert and PGDip</b> and whether they will be pushed back to graduate level or not. Info TESQA website.	Unis make views known to Chairs of Academic Boards
Nov 2011	Set dates for Lismore meeting – end March early April 2012. See proposed agenda items (p.12)	Jerry Vanclay
October 2012	Visiting speakers to Canberra ACEDD meeting 1. AUSAID and ACR 2 TESQA	Stephen Dovers ANU
	<p><b>Potential Actions:</b> Set up an <b>emeritus network of ACEDD</b> of retired environmental specialists for our own work and also to recommend to others requiring expertise Does the <b>constitution</b> need review to allow for the President to speak on issues to the media and to clarify the role of the Council in advocacy?</p> <p><b>Environment infrastructure:</b> ACEDD could work out the details of infrastructure needed in the medium term to be better placed for future funding streams from DIISR.</p> <p><b>Consider project for funding on networks of ACEDD community</b> - partnerships with different institutions internationally and across the Asia Pacific region.</p>	

# Australian Council of Environmental Deans and Directors

## Minutes of Canberra meeting: 27-28 October 2011.

Venue: Seminar Room, Frank Fenner Building (#141), Corner Daley Road and Linnaeus Way, ANU  
President: Steve Turton JCU. Meeting Host: Steve Dovers, Fenner School of Environment & Society.

## Business Session

Welcome to Country and to ANU by Steve Dovers and to the new Fenner Building (6 star) and the first function to be held there.

- Introduction as several new participants to the meeting.

Recap of March meeting:

- ERA 2010 – our concerns regarding multidisciplinary fields and FoR codes. Steve Dovers prepared a response that went to the ARC and it seems they took some of this into account for this next round.
- Hope to have ACEDD environmental science PhD award in place for next year
- Science meets Parliament, ACEDD sent two early career academics and we had excellent feedback from both. We will consider this again for next year, and ACEDD might consider supporting opportunities for those outside Canberra.
- Potential for ACEDD meets the press
- Budget: circa \$40K, fees owing from 11 universities; have sufficient money for new projects

Other matters raised:

- Accreditation of degrees. This has been discussed before. There is no one body that is available to do such accreditations. Environment institute has been discussing this, but only in a small area.
- Seeking guidance on managing arrangements for overseas students coming to do environmental programs in Australia, e.g. commence in China (India) and complete in Australia; issues such as assigning credit for studies undertaken overseas; and weak technical English language skills and science language literacy.
- Article in paper Oct 26th on Asian students and the need to incorporate Asian or regional examples into teaching.
- Coal seam gas was raised as one of the biggest environmental issues at state level and a discussion ensued as to whether ACEDD needed to intervene in some way. (See later notes on the topic). It was decided to meet with a representative of the Council of Agricultural Deans which was also meeting at ANU at the same time to discuss possible joint action.
- ACEDD could review the extent of partnerships with different institutions across the Asia Pacific region and investigate some gap analysis; while no doubt better on paper could provide opportunities.

## Action: Consider funding a project to collect information on networks of ACEDD community.

- Kevin Rudd's recent review of AUSAID provides an opportunity to do more with the agency and ACIAR. The review shows the best benefits are from money invested in international agricultural research. There is potential for a "revised Colombo Plan" and opportunities for partnership arrangements for universities involved in environmental education e.g. Garnaut

review of UPNG shows lack of institutional capability for those returning with skills to operate effectively plus the need for environmental education. Kevin Rudd might be a willing ear.

#### **Action ANU: Next Canberra meeting meet AUSAID and ACIAR.**

- Future issues for universities raised by Richard Horsfield are presented for inclusion in discussion in working groups, as circulated.

## **Information Sessions**

Day one included three presentations from Australian Government staff. Highlights of these presentations are outlined below.

### **Australian Government Dialogue session 1 –ERA**

**Leanne Harvey ARC** Executive General Manager and responsible for research excellence branch (ERA). Leanne ran the last ERA round in 2010.

ERA provides a comprehensive overview of the quality of research undertaken in higher education institutions across the country in an international context. It provides important information to justify the government's research investments, to explain to the public the value and impact of research and to know in what areas it might need to support research to support policy. It helps to identify how to help certain research areas e.g. with collaborative research money. ARC is a small part of Australian government R&D. The ARC process has proved useful to some universities that didn't fully understand their own strong areas of research.

The presentation will likely be available at [http://www.arc.gov.au/media/arc\\_presentations.htm](http://www.arc.gov.au/media/arc_presentations.htm)

- Chairs for ERA 2012 are announced and nominees for research committees required.
- An appeal is to have academics involved in data input rather than research offices
- No one in ERA can change rating... it is professional judgement of the committee.
- Assessment is on volume and activity, journal quality, citation analysis or peer review, research income.
- All 41 institutions participated, 2435 units of evaluation assessed at the 2 and 4 digit level, 330,000 unique research outputs and 55,000 researchers. Looked at papers jointly submitted by multiple universities to arrive at the number of unique papers.
- ERA did not do league tables, but the media did sometimes.
- Myths- ERA 2010 cost 100 million; journal rankings will not still be used in Round 1.
- Consultation is available. What you need and think should be assessed as an indicator for the future round of ERA. If we should add in XYZ we are happy to look at it. Some want to move from peer to citations analysis. If there are things missing then ERA is happy to talk to unis on this.
- Encourage universities not to aim too high, across the board.
- Journal articles with >66% of content in a field can be apportioned to that discipline.
- Eligibility of fractional staff, min 40% appointment
- It is planned to do a review and check that research excellence has been improving as a result of this process

**Australian Government Dialogue Session 2- DIISR - Department of Innovation, Industry, Science and Research**

**Ann-Marie Lansdowne**, DIISR, Head of infrastructure, responsible for international science program and Cheryl ..... acting head research infrastructure branch (broadband, ICT)

Research infrastructure is a vital component of a high performing research sector which in turn is a fundamental component of an advanced innovation system.

See the *2011 Strategic Roadmap for Australian Research Infrastructure (2011 Roadmap)*

<http://www.innovation.gov.au/Science/Documents/2011StrategicRoadmapforAustralianResearchInfrastructure.pdf> states the priority areas for national, collaborative research infrastructure over the next five to ten years (capability areas) – subject to funding.

- In 2004 it was very clear that research infrastructure was run down. 542M was allocated for research infrastructure at that time, but it was estimated that what really was required was around 3 billion.
- Australia cannot afford to duplicate infrastructure or have competition amongst universities, so it started an infrastructure road map project to meet needs of research. Asked unis to look at capabilities and not just discipline infrastructure. Used expert working groups, looked at what needed to be addressed quickly, what would be required into the future.
- A change of government caused a review of infrastructure, which was then affected by the global financial crisis.
- It is realised that not funding operating costs is a real impediment to good research. Trying to make the case that these facilities need to be run by technical specialists who can run the facilities and managed economically. However, with only 900M available, they looked carefully at what to fund.
- **Now all current funding is running out middle 2013**; looking at this with the government and making the case that we can probably sustain this effort for 2012 but need to know what government's intentions are into the future- as per "road map"- which uses the same formula as national research priorities
- Capabilities are integrated across several areas, so be careful of just reading the summary in the road map document.
- International trends are being tracked. Bilateral research funding is only taking place in areas we want to establish research collaboration, ie China and India; arrangements to encourage USA researchers to collaborate with Australian researchers.
- The better organised that discipline areas are, the better placed they will be when the next funding becomes available, whenever that is. It is likely to be later rather than sooner. Need to organise the community to come up with suggestions on what to do, say which would be best way to organise and align yourselves. It is more likely you will be successful if organised and use the rationale for these areas from the road map.
- Be good to identify stories about the benefit of environmental research, to society and to policy and to personalise the story to show impact of research.

**Potential Action:** ACEDD could work out the rationale (based on the road map), details and priority about infrastructure needed in the medium term, such as the research areas and ways to coordinate that research area for the environment. What is critical mass in this area? What looks like a reasonable proposition?

**Australian Government Dialogue session 3 – SEWPaC** -Department of Sustainability, Environment, Water, Population and Communities

Sean Sullivan 1<sup>st</sup> Assistant Secretary Communication and Governance and Jane van Lett – Assistant Director economic and policy team. Paul Grimes Secretary sends apologies.

- Ocean policy, positioned, we will have a marine national reserve system of world class including the Coral Sea and NW Australia.
- Reform of the EBPC Act - should go into the parliament mid next year. Major shift to strategic assessments, rather than individual approvals,
- 1Billion investment over 5 years into biodiversity fund, to also work on corridors. Haven't resolved if projects under the biodiversity fund will also have to deliver a carbon outcome at the same time.
- Offset policy will put some rigour into the agreements and transparency.
- We have a water market (Government is a big player with 500 gls added into environmental flow) and now a carbon market. What we are missing is a biodiversity (BD) market.
- We have had a maturing of the definition used for Ecologically SD, which gave the environment prominence. Sustainability is about wellbeing and intergenerational equity, and this is made up of human, economic, environmental, capital base. This is now the message coming out of the treasurer, which is a huge step forward.
- Population policy should have been a demographic policy- resulted in a need for a sustainability assessment.
- Environmental Education/ Sustainability education – is an aspect in the national curriculum reform; though no funds in the pipeline for this area. This area is not the top priority.
- There is a problem in educating decision makers about sustainability.
- Need to think about Rio + 20 and getting the environmental back on the world political agenda and not just climate change.
- The skill set required for future graduates? To deliver strategic assessments will be required in 5 – 8 years' time. Many graduates don't have any economics skills. It is really important to get more people with multi-disciplinary skills, i.e. economists with an environmental brain, social policy with science training. Need graduates with economics, environmental, law, ecology discipline, i.e. people with multiple degrees from different disciplines, people who can work in multi-disciplinary teams, how to do multi-disciplinary strategic assessments.
- Need some robust framework around the depletion of resources and the required offsets. What is the return to the taxpayers for the one off removal of their assets from Australia? What is the dividend to the community? We can only dig this stuff up once. Why not 1% dividend on resources for the government to try to get cost recovery? What is reasonable way to proceed, perhaps an idea put forward by this group?
- Government makes use of a lot of expert panels to cover skills that they don't have in-house; one of the issues is to identify who are the right people in each field to put on these panels. It's often who you know rather than actually knowing the best people in each field. The Dept has not kept up to date with our discipline's requirements of emerging issues. ACEDD could help with building the folio of expertise. They will come back to ACEDD about how to get the lists of the right expertise, and skills coming from the university sector into the future for new staff.

**Potential Action:** Set up an emeritus network of ACEDD of retired environmental specialists for our own work and also to recommend to others requiring expertise

## ACEDD Business Sessions

### 1. Coal Seam Gas

**Action: Australian Council of Agriculture Deans ACAD and Council of Environmental Deans (ACEDD) agree to undertake joint action on coal seam gas.**

- **Make a joint media statement which will state the need for strategic assessment of the whole decision making process on coal seam gas.** *Follow up: A draft statement was prepared and presented to Council. Some modifications were suggested and the statement was sent to ACAD.*
- **David Gust to organise a report on Coal Seam Gas strategic assessment and decision making process. Approach ACAD to co fund and Dr John Williams to draft it.**

This decision occurred after Iain Young, deputy Chair of ACAD informed us that ACAD wished to called for a moratorium on CSG and more research on this topic. ACEDD was more circumspect about a moratorium and discussion points are recorded below.

- ACEDD consulted its constitution as a result of this discussion. ACEDD hadn't seen itself as a lobby group. In fact the President's right to speak on issues seems to have been removed from the final text. There was some discussion as to whether ACEDD members are free to engage in such positions, whether individuals on the Council could support this position, and their representation of their universities. It was agreed that members are representing ACEDD not our individual universities. A decision of this council is not binding on our representative universities.
- The key issue is that CSG needs proper evidence based decision making. ACEDD needs to say at the same time, that this is the sort of approach that needs to be undertaken before going further, i.e. not the detail but the principles.
- ACAD want to go down this path due to the precautionary principle, need to stop and look and find more information. They are also concerned about food security. ACAD stated whatever path we take, they want to support us. It was agreed that it is important for these groups to be initiators and influencers, as there are lots of other topics that the two groups can work together with ACEDD.
- Most members think that we don't have the information ready to be able to say what process should be followed. ACEDD members are concerned with calling for a stop of the coal seam gas industry, only asking for more information to be found before going further as this will polarise the mining and science community. Much data is held by the mining companies and we if put them offside, we aren't going to achieve the outcome we are after.
- There was discussion about whether coal seam gas was more about values and landscape. Others felt that the issues around coal seam gas haven't had the attention they deserve with 40,000 wells approved – the impact on water use, aquifers, and salinity risks. Commercial issues are massive too. Universities collectively have been silent on this and need to speak up. Some thought this could be expanded into the use of fossil fuels as e.g. Qld is proposing some of the largest open cut coal mines in the world. Others though as we are a small group and can't cover everything at once, it is better to do something more narrow at this stage, i.e. coal seam gas and then later try to put that in the larger context.
- Most felt we should speak out as our role is particularly in education and leading the community. We don't need to say this is good or bad, but more in terms of if this industry is to proceed how it should go ahead and how would it be approached. The position paper would aim to find out if enough is known; and encourage more research if there is a lack of

scientific knowledge. We could produce a report similar to those of the Australian Academy of Science report on climate change; which frames the information on not what is right or not but on the quality of the science underlying the issue.

- Key points for the statement are that a proper strategic assessment needs to be undertaken. There are so many projects on the books, and they are not been looked at collectively, which is what should be happening. Could start by saying the current process is not adequate and then say why, and what should be happening. Need to talk about evidence based but not a moratorium. Could call for a national forum with all stakeholders, this could be more constructive. We can call for no further permits to be issued until certain things have happened (slightly softer than a moratorium) and then list what's required to be done.
- This would be a good topic to take to a 'meet the press' session – when we have the story sorted.

### **Coal Seam Gas Position document**

- Describe what a good process would look like for society to make decision on coal seam gas; are the permits issued with sufficient robust evidence?
- Present a view on process issues. More a document from an educational and research point of view, rather than coming out with a position.
- If we are to have coal seam gas extraction this is how it should happen and how people should be informed. A document in the style of the Australian Academy of Science state of the environment on climate change
- Consider state of science on coal seam gas; state the uncertainties and so provide a community service. (Note how New Scientist deals with uncertainties on climate - these do not cancel out the certainties, it is possible to say definite things even though there are uncertainties.)

### **CSG document production**

- David Gust, a geologist and respectful of mining who can oversee the project document production process and invite CAD to co-fund.
- **Dr John Williams** should be approached to draft the document. He is has led the national debate about sustainable land management and was a Commissioner for the NRC from 2006, former Chief Scientist and Chair of the Department of Natural Resources' Science and Information Board and Adjunct Professor in Agriculture and Natural Resource Management at Charles Sturt University. He understands the policy language. CAD may be a good group to invite him.
- Other people mentioned are: Graham Harris former chief CSIRO land and water – knows water issues; Bob Watson – geomorphology – former director of CRESS; David Cassells – hydrologist; John Blackmore Murray Basin expert. Rick Evans – SKC geologist though would be at market rates; Brian Walker – resilience framework; Des Connell toxicology; Alistair Gilmour.

**Potential Action: Does the constitution need review to allow for the President to speak on issues to the media and to clarify the role of the Council in advocacy?**



## 2. ACEDD Projects to define the field, programs, student enrolments, employment and fieldwork sites.

Richard Horsfield Visiting Fellow Macquarie University, gave an updated report on the progress to define the environmental studies field, the programs, employment opportunities and field sites. His presentation and second report are attached. CDs with part 1 of the report were distributed.

Richard requested any corrections to be sent to him at [horsfield@exemail.com.au](mailto:horsfield@exemail.com.au)

- There has been difficulty in proceeding as universities have not responded with enrolment data. Most universities are unable to easily provide enrolment data or were not able to without permission of VC, or had no time. The data for the 2 universities that have complied won't be released. To produce institution specific data it is likely we would all need to approach our VCs to see if they are prepared to have this data in the public domain.
- It was suggested that it might be better to do an anonymous survey to gain ballpark figures to show the strength of the field. Note we need to collect information on areas of activity that are collaborative such as at the International Water Centre programs.

### *On field studies centres*

- The research on field work facilities has just started; again it is complicated.
- ACEDD could look at the possibility of field studies units being offered to students from other universities. Environmental studies needs to have a strong field base but these units need good numbers to be able to run. In some unis its becoming harder to run fieldwork due to cost and risks.

### *On Employment*

- Employers tend to look for generic skills, team work skills, lifelong learning. One way to track graduates that doesn't need ethics clearance is social networking.
- It would be good to know what programs are offered by distance. However many university websites don't clearly state this
- Issues with the shrinking capacity of the academic profession in Australia.

Most of the issues were referred to two working groups where they were discussed.

## ACEDD work sessions

### 2a. Documentation & analysis of Australian environmental coursework programs

#### Field stations

Information being sought on field facilities is partly about potential collaboration as well as making them available to others and about field study units being opened up for other universities' students. There are field stations used in Africa and Italy e.g. designed for use by Monash and Australian Centres cover a range of biomes. Even Vet Field stations might be used for environmental study; as are particular forest sites and mining operations, where ongoing relations have been developed.

- How do define field station? Limit to field study centres or field sites also? Are we trying to demonstrate the field dimensions of programme...?
- Develop a register of field stations in Australia- Continue on with that.
- Inventory of field based units.
- Look at international field stations.

- Explore whether there is possibility of making these field stations available to a wider set of universities.
- How we manage to deal with compulsory field work – Can we provide some principles for valid environmental programs such as holistic learning?
- What are charges and who pays and how much the student covers? What are the rules re being able to charge for food?
- Field study courses, where taken into field based course where go and how long-list asset – is looking at relations with organisations

**Action: Continue with fieldwork data collection to get a national register, and a list of subjects that are field based or have a significant component of fieldwork. Horsfield/ Merrick produce report for March meeting. Funds for this work were allocated as part of the 2 projects being undertaken by Horsfield.**

**Action: ACEDD members to respond to survey monkey and provide data; the likely time frame in next month or so.**

**Action: ACEDD should come out with some statements regarding what are the fieldwork requirements for environmental programs. This should be considered in our TEQSA input**

## **2b. Document scale of ACEDD portfolio.**

- Purpose is to get rough ball park figures so we can show who we are, to be able to provide a one pager to people that represents the size of our field.
- It would be good to know what international collaboration is taking place on courses.
- Start to build long term data on our field, not linked to an institution that cannot be tracked back to the institution. Aim to gather the data each 2 years.
- Consider: numbers of how many study UG and PG and HDR.
- How many publications / research income raised and how many publications are used for political purposes. (use some of the ERA data)
- How many research staff, compared to teaching staff, those on research grants. A staff profile; include research and academics. The purpose is to show how big we are- the extent of the intelligent mass.
- Survey data could give an indication of the brittleness of the situation as a lot are sessional staff as there is increasing casualisation and researchers are on 3 year grants
- Want a good estimate. Though codes for research are too complex? Could have a question on codes? A lot of what we do does not fit under 05 code, which is a point well worth making. What done in 05 what other codes do you commonly do?
- Will prepare a survey monkey survey and invite you to give your best estimates of figures. Individual university data will not be reported.

**Action: Prepare and test survey with a pilot group before sending to all the council for their input.**  
Steve, David, Karl, Hamish to take part in pilot trial

**Action ACEDD members provide ball park figures on enrolments which will be anonymous.**

### 3. Teaching standards & responding to TESQA

The Australian Government is establishing a new national regulatory and quality agency for higher education, the Tertiary Education Quality and Standards Agency (TEQSA). Geography, Chemistry and law are undertaking pilots in developing minimum standards which could be used as a basis for the environment fields.

- Learning and teaching standards will be set for a discipline for compliance in 2015. These may be more at the level of good practice guidance.
- Universities will have to achieve demonstration of outcomes for these minimum standards through moderation of assessments comparing first and 4<sup>th</sup> semester standards by peer review by other universities
- The first draft on teaching standards seem to create difficulty for team teaching and PHD students teaching UG / Honours
- Role for this group is to set standards – a challenge in environment compared to chemistry because of diversity of the field. Potential project for ACEDD.
- Master programmes are level 9. Three Master degrees recognised in AQF: Masters with 2/3 research ; plus Master by course work with some independent research and practice, the amount is not specified.
- AQF has been imported into TESQA. There is still a debate about the standards of PG Cert and PGDip and whether they will be pushed back to graduate level or stay at PG level and can contribute to level 9 Master degrees (which will have to have research). **This discussion will be reactivated in November with a discussion paper, so ACEDD needs to be tuned into that.** Info will be on the TESQA website. It will be important to convey views to Chairs of Academic Boards in your own university who will deal with this discussion. Issues in attracting international students who can get one year off for Post grad study. The PGDip meets this need but it needs to be at post grad level.
- Next Canberra meeting would be a good time to have another presentation form TESQA and scope what standards might look like. It is now looking like these will be more motherhood, so don't commit too much.

What do we need to work on?

- ACEDD needs to take the initiative to define the teaching and learning standards for the environmental field. Otherwise we are likely to be provided with generic science outcomes
- Mine what been happening and use consultant to look at the geography pilot as a good starting point.
- The standards will require each unit to have objectives, learning outcomes for each assessment, more explicit statement of the expectations and the skills you will have at the end of a unit and also to be able to see how each unit contributes to the learning outcomes of the programme.
- A statement of what each graduate attains at the end of a degree will be an expression of the core units and how they are vertically integrated. Electives have to be reasonably sensible choices to add to this framework of outcomes. Will this work against generic degree?
- Make sure nothing is imposed on us, from people who don't know the field. It may be possible to ask for co funding from all the universities if we take this on as a full project.
- **ACTION: Set up a consultancy (invite Richard Horsfield) to undertake a desk top review of the thinking on ALTC standards across all disciplines (particularly Geography ); scoping**

**study to think about what kind of standards are appropriate for environment, draw on the ALTC environmental engineering accreditation project process analysis (led by Julie Lamborn); liaise with TESQA about how ACEDD can be recognised as the body to undertake the Environmental studies, Environmental Science; Sustainability programmes etc; work out the best way to interact in the process and timelines. Link this with how to define the discipline. Present Recommendations to the Lismore meeting March 2012 in an interim report. Show the range of programs to TESQA. Request project outline – funds within \$10- 15000 with some travel.**

- **Action Stephen Dovers** - Invite TESQA to next Canberra meeting 2012 (at U Canberra).

### **Next Meeting – University of the Southern Cross, Lismore**

**Proposed Date** – end March or first week April – at Southern Cross Uni in Lismore: to be confirmed by USC. Propose late morning start, dinner and more working sessions the next day with early departure

Possible agenda items suggested for consideration by the host

- Gas Seam Gas Report and consideration of next steps
- Report on results of survey monkey on the formal linkages with overseas institutions and in Australia
- Report on mapping of international networks
- Report on ALTC project for accreditation of environmental engineering - learning outcomes and process of review – Julie Lamborn. Swinbourne
- AURIN presentation by Dovers to follow up on the infrastructure discussion in Canberra and presentation on TERN by Andrew and perhaps Andy Lowe from Adelaide. Also Daintree Rainforest Observatory is a TERN site; so Steve Turton could be involved too.
- Extent to which Asian materials and ways of thinking are incorporated in the programmes – added to working group
- As the idea of regional meetings is to meet and talk to state and private industry in the regions, to advance environmental education etc would it be possible to have some discussion session with local or state government department – e.g. Local CMA ? or with government officials from Grafton and Coffs Harbour?
- Possible discussion with industry on skill needs, note forthcoming skill needs report November
- Possible Field Trip perhaps connected to coal seam gas site in the afternoon
- Indigenous perspectives: why is environment not doing its fair share?
- Possible break out group discussion with Chris Mathews who is working in Griffith indigenous unit as a speaker
- Consider possible social gathering with university staff who might be interested to interact with ACEDD; even a presentations on what is taught; research

**Action: USC to advise on dates for the next meeting.**

Closing: Thanks were expressed to Stephen Dovers and Di Wallace for all their work to organise the meeting and guest speakers.

Minutes prepared from great notes by Julie Lamborn by Wendy Goldstein October 30<sup>th</sup> 2011