Australian Council of Environmental Deans and Directors

October 18-19, 2012: University of Canberra Venue: Anne Harding Centre Building 24, University of Canberra, Belconnen **Draft Minutes**

Thursday 18 October		Action
October		
Attendees:	Steve Turton, President ACEDD Ken McQueen, UC Host. Minutes Prepared by Julia Lamborn	
	Jennifer Watling (Adelaide) Steve Dovers (ANU) Ken McQueen (Canberra) Judith Wake (Central Queensland) Andrew Campbell (Charles Darwin) Guang Shi (Deakin) Pierre Horwitz (Edith Cowan) Andrew Millington (Flinders) Tony Carroll (Griffith) Steve Turton (James Cook) ? (Macquarie) Rod Keenan (Melbourne)	
	Dave Griggs (Monash) Karl Vernes (New England)	

	Jamie Schulmeister (Queensland) Les Dawes (Queensland UT) ? (RMIT) ? (South Australia) Jerry Vanclay (Southern Cross) Tor Hundloe (Bond) John Bartlett (Sunshine Coast) Julia Lamborn (Swinburne UT) (? Sydney) Graciela Metternicht (UNSW) Charles Morris (UWS) Randall Robinson (Victoria) Richard Horsfield (by invitation) Apologies: Wendy Goldstein, Macquarie Bill Gladstone UTS	
Confirmation of minutes of previous meeting	Corrections: Action item for O&HS for fieldwork, it was decided not to draft letter at this stage, therefore delete this action item. Accepted the minutes with that correction.	
Chair's report:	 Coal seam gas report, liaising with John Williams who was developing the report and sending out for peer review. This report will be launched tomorrow with the media in attendance. We have provided the media summary to members and the full report will be available tomorrow. The report went out to 6 reviewers, who felt that it was a fair and balanced report. The Council felt that the report was good value for the money. Wrote to academy of science, a copy of the letter was provided with the agenda. They were looking for feedback on the review of national committees. ACEDD does not directly link with national committees but individual members do. We would like to explore options for closer links. It was felt that the national committees do not cover our multi-disciplinary nature well. Discussion on this response: worth pushing for a committee on ecological sciences, need a firm recommendation from ACEDD. We said in the letter we were interested, but the Council felt that we would like to pursue this further. 	Chair to write letter endorsing this proposal

	Council felt that we also need to explore links with social science groups. Some of these national committees are active but others are not. Priority is to push for a committee within the academy of science and then concentrate on other options later. 3. Science meets parliament: sent a couple of representatives, they reported that it was extremely interesting. However, the question time did not work well. In future it would be worth trying to pick representatives from outside ACT if possible. It would be good next time to provide the ministers with information on ACEDD. This could then be followed up with an invite to the ministers that were present to visit those universities. ACEDD could allocate a small budget for early career researchers across the country to apply to attend this meeting 4. Had a few meetings with Richard Horsfield regarding teaching standards. OTL will be calling for applications of discipline scholars to work on teaching threshold standards. This will be discussed later in the agenda 5. Budget – Wendy is an apology for this meeting. Our account is empty as the invoices for this year's annual fee are about to be issues. Last payment was for the coal seam gas report, need \$6K more to finalise this account and then cover the cost of this meeting. It was requested that all members rush the payment through their universities. Questions were raised regarding the level of the annual fee; some members felt it should be higher but that it should not be raised too quickly.	All members to pay annual fee promptly
T & LAS Project	Refer to draft document to be submitted to the Office of Learning & Teaching to employ a discipline scholar and project officer [Turton & Horsfield]. Richard has been working on this. Have a PD for a discipline scholar (if we were to put this into OLT). You don't have to be a university to apply for grants but we are not an incorporated entity. Send out for expressions of interest for mid-career researcher who would get a half time buy out for 3 years. Richard would be happy to work pro-bono with this person as the project officer. Then need to set up a committee to look at the expressions of interest, interview them, then that university would apply for the grant from the OLT with ACEDD setting up a reference panel. Critical thing is to capture the diversity of what the Council covers. The skill set is critical in the selection of the person rather than the level. The other option is to look at a person in retirement, however this takes away the direct link to a particular university. The current PD is based on the geography discipline scholar PD. Two main points: - reference group would need to be diverse – engineering, social science, env science, geography - need the PD to clearly state the tasks for the discipline scholar Need to really wait for the OTL call for applications. In the meantime need to concentrate on who	All members to provide feedback and detail on the PD for discipline scholar

	would be suitable and would have the broader view of the sector. Need to set up the reference group. Not all who attended this meeting received the papers, need to update the membership list and circulate to all members. Not all members are aware of the diverse nature of whom the council represents. Need to get a summary written: international context, review literature and align ourselves with work being done elsewhere.	All members to update details for membership list
National Curriculum for Sustainability	Item carried over from last meeting [Working Party: Wake, Hundloe, Gust & Bartlett]	
Science.	Little has happened since the last meeting. Tor is waiting for a response from EIANZ. They are having their anniversary dinner next week and Tor is the keynote speaker and will be able to follow this up at that time. Only some universities are pushing the concept of sustainability science (newer universities are doing this or universities with newer programs). How interested is the council in pursuing this? Overseas this concept is taking hold. We have not made a great deal of progress in Australia. Chair received information from Monash on a module they ran that was well received. Monash would probably like to be involved. Most environmental areas are so multidisciplinary that it's hard to define all skills sets that our graduates need to prepare for. In considering a new discipline of sustainability science, this would not cover all other environmental areas. Some universities have an environmental management degree that covers many of these areas. Tor believes these programs need to include environmental economics. You need to define the difference between sustainability science and environmental management. We need to be clear on what we want to achieve, need recognition through TESQA. If we are talking to industry, it's the skill set that that industry would recognise. These are two totally different things Most common degree in this field is environmental management. If you need specialist training, you expect someone with PG qualifications. Need balance between specialist and generalist. Any discipline needs to understand their work in the context of real world issues. Could be a 3 + 2 approach. Issues these days require graduates who are multi-disciplinary and inter-disciplinary in their training and outlook. This group needs to provide both specialist and generalist thinkers. Should the approach be to accredit a masters level program as it's more specialised. Need to make	Tor to report on EIANZ

	MEnvirManagement more attractive. There is a huge variation across the country in what's taught in both UG and PG environmental degrees. The Council needs to identify the key and minimum requirements. This what TESQA will require and it's what is needed for AQF compliance. We need to define our terms, i.e. environmental management and environmental science and what is sustainability. If we were to consider accreditation of our programs, is there any professional body that we would be happy to work with? B Sustainability at James Cook, they select a major, 4 core units, intro to sustainability, science, business or social science major (only 2 doing this) rest are split 50/50 between the other two majors. Both groups are complaining about some of the units they have to do. The program was set up to make students move out of their comfort zone. It would be good to find out what each university offers in this space and see what the commonalities are across the discipline.	All members to document what is done at UG and PG level (i.e. specialist vs generalist) Steve to collate data
Online delivery	UQ has made the decision to get involved with MOOCs (massive online open courses). The majority of universities are talking about this, if they have not started trialling it already. The MOOC will completely change the modes of delivery will change in the next decade. The tradition lectures may be gone. How will environmental education fare in the online world? There are things that we do that can't easily be put online. Members agreed with this projected future. Most of the existing online courses in this area are North American examples. It would be good to develop our own material. University of Illinios has an environmental program, half by MOOC and half face-to-face. MOOCs are a great way of promoting the institution particularly to get PG students. Some VCs think that MOOCs can save teaching staff. They raise a number of questions: what about QA of materials? How do you know if a university has the background to put up the programs they have. The reason universities are interested is that it attracts students, they must pay to get a qualification and only get a certificate of participation for the MOOC if they complete the unit. In some cases, you can't be assessed unless you pay. Too much attention at the MOOC level, online programs is probably where to concentrate on or blended models. In our field, you need field and lab classes to teach the necessary skills. It is important to highlight the value of the blended model. Students are often using the online resources and recorded lecturers rather than attending in person. Student surveys have shown that students still want to face to face with online resources. Need to look at the opportunity for how to use the time, and approaches in a more blended/flexible approach. Most students do not want to be fully online. Need the right balance with what is online	Chair to provide information on what has already been

and face-to -face (and in the field), need engagement with other students, teamwork, interacting with the environment.

The way to treat MOOCs is a successor to a textbook, a multimedia version of a textbook; do not believe it will replace a textbook. We need to provide students the experience that they will not get online. Issues with fieldwork are that you cannot make students pay for a compulsory part of the program.

Teamwork and communications are important to employers – universities must provide experiences for students to develop these skills. There are also issues in staff workloads in delivering face to face and online at the same time.

Some universities do not understand that putting units online require specialised skills. Some felt that MOOCs won't change anything just like open university didn't. With online units, staff spend lots of time answering student questions.

Need to have shared fieldwork sites across the country. This would make it very attractive for international students. It would be good to put together a database of all field units and field sites. Need look at sharing of resources. Look at combination of block mode with different fieldwork types. Many online students are not able to attend fieldwork and pick units that don't have a face to face component. Fieldwork and field teaching is a positive for us.

Look at who is running MOOCs overseas, many of the world's top universities are involved and they are using their top lecturers. Currently MOOCs are free. These universities will still want to ensure their prestige is maintained. For us we need to remember this material will be USA centric and not set up for other countries. Our advantage is that our programs are locally relevant and have fieldwork.

One of the challenges for an individual university trying to get 'stars/experts' to deliver is hard. It would be easier to do this collectively. Perhaps the Council could look at this when we have more money available for projects. The cost of developing quality online material is huge, need to do this collaboratively. Need to look at models that have worked, and appropriate funding bodies, i.e. OLT grant.

Strength of ACEDD, is that any funding body is funding all universities and not just one. Look then at collaborative marketing, do an environment program and you can work around the country This is actually a major undertaking particularly if trying to do this across 30 universities. What about developing an online intro to three areas – env eng, env science/ecology, env sustainability/policy

Highlighting offerings at all the universities. Add video clicks, fieldwork, pictures, interactive – why would you want to study env science? If this works well, then it could be easier to go further.

done on database of fieldwork sites

Environment infrastructure	Look at who has good online courses already, who has video of fieldtrips that we could use? Need a subcommittee to run with this. Subcommittee MOOC: Steve Dovers: policy, Julia: Env Eng, Karl Vernes: Env Sc/ecology Field work sites/courses: Karl Vernes, Andrew Campbell Not sure regarding progress on this as Steve Dovers had to leave for a meeting. Asia pacific – developing partnerships – look broader Australia/Asia	
roadmap project	Student exchanges twinning programs –PG and UG, what are the obstacles, T&L and research – what are the solutions, articulated programs 2+2 Look at opportunities, weakness, threats, solutions	
Australia-China network for environmental studies.	This network is focused on China and other parts of the region and looks at: opportunities, education and research, solutions focussed, similarities of conditions with China, destination of chose for Chinese students, strong trade connections, cost of programs and willingness to pay, language training before they come, limited exposure to staff teaching these students not enough Chinese examples, employment prospects, 2+2 program, fieldwork, research many Chinese graduates working here, good regional research reputation but under resourced compared with USA and UK. Not enough experience with staff doing collaborative research with Asia countries. Discussed the diverse student countries, incoming student issues – teaching style, language issues, IELTS does not cover the technical English in the discipline students are studying in. There is a big difference between English speaking and writing. China – relationships that are difficult to maintain, particularly if teaching in country, easy to go the rest of the start but then staff lose interest better to build on the back of collaborative research. China	
	there to start but then staff lose interest, better to build on the back of collaborative research. China interested in 2+2, but if they want to send several hundred students, which would totally change our programs. Vietnam is easier to work with, the relationships easier. Issues to consider are the QA and what TEQSA will require, how to meet AQF level 8 with these programs. The exit points for masters programs are not well defined.	
	Next steps on the fieldwork sites inventory – it would be good in a relational database. Will trial this with UNE 11 field sites. Will be investigated getting information from all universities. TERN – would be good to get an update on this.	Maybe ask TERN to give an update at the next Canberra meeting

	Similar organisation to ACEDD in Asia that we could build relationships with. Global university partnerships on sustainability – UNEP.	
Friday 19 October		
Dr Subho Banerjee, DCCEE (Dept climate change and energy efficiency) Deputy secretary Public policy approaches to climate change adaptation.	His background is physics, PhD physics (laser) then got interested in public policy. He has done a range of economy policy and now works in climate change. Lots of important work to do on the science but also with adaptation there is still a lot of work to do. Decision makers struggle to come to terms with the adaptation polices. Not all this material is fully accepted, even though for some Council members this material might be very basic. When talking about adaptation you must also talk about uncertainty. This is the critical part of public policy approach. Presented the long-term warming trend for Australia from 1910s onwards. This is contributing to a record number of hot days and its having an impact on rainfall. Australian government's climate change work has three pillars: to reduce GHG, adapt to climate change we cannot avoid and help shape a global solution. Many politicians think about adaptation being how industry reacts to the carbon price. Most adaptation funding internationally is provided through AustAid, but this does not have a common definition. He is involved with international adaption work as well. There has been a national effort to identify vulnerable areas for priority climate change adaptation action. Have been doing coastal work, developing tools for predicting impacts, looking at future planning, providing visualisation tools. Have been doing well in the economic evaluations, i.e. what is the potential impact in economic term. The numbers involved with this are large. A good way to think about policy, is to consider the science first and then policy. Science – structure problem – assess relevant climate changes – assess relevant impacts – design and assess adaptation options – evaluate outcomes This is not how it works from a policy viewpoint Policy – structure problems – propose adaptation strategy/options – assess strategies against scenarios – assess trade-offs between options – evaluate outcome For policy purposes – thinking about the science and how that plays into the bro	
	In assessing options, need to think about how to value flexible and modular solutions. Many decisions are almost impossible to reverse, i.e. allowing people to build homes in areas where there	

will be significant sea level rise. The climate is changing and the impacts are already being felt, this means that adaptation efforts are critical

One of the issues is how to get this across to politicians particularly where you are talking about longer time scales than politicians normally think of. What is the best way we can present the information – some things open up different possibilities and some lock you out, this is a hard message to get across. If this is done better, then it would be easier to deal with the politic cycle. If you can present a compelling case then many responsible ministers will take a longer-term view.

There is a lot of discussion in government regarding what should be the discount rate. This is not an easy thing to move. The whole issue with public policy is to think about which constraints are binding. There is huge pressure in establishing the value of climate change knowledge in the first place. Must also get out and promote when the science has been proven. Need to interact with the decision makers, so that they feel the knowledge was really helpful. Must keep thinking about how to make the case for the fundamental scientific knowledge but it can't look self-indulgent.

The Federal government is developing energy policy using numbers that are wrong. How do we get the right information to the decision makers? People have different views, must get important information out there and then argue the case. Forecasting is very difficult. Even if we publish the best estimate one day, there could be a change tomorrow in the data. Must think about how to provide more flexible forecasts, looking at different scenarios. Need to look at technology, demand side, real interest is how to develop scenario based tools that have a strong basis in science. If you are going to trade off with options, then you have to be able to value these adaptation options. This is the critical issue; if it's not done properly then you are making partial decisions without full information. Most advice to cabinet is point estimate – if you could go to contingent valuation it would be fantastic.

He wants to get work done in this space and is looking for collaboration. There is a demand for people to come to Australia and do climate change adaptation.

Key attributes for people to go into government and work in this area: critical thinking, intellectual firepower, more important than discipline specific knowledge or skills, then people that have scientific grounding (with rigour) people who are interested in dealing with socio-economic complexity of these issues, an understanding of why things are hard and how to deal with this issues. Need passion, enthusiasm, smarts and want to change things, a wider awareness, how their

discipline would be applied.

Have a graduate program and he had over 800 applicants – often spoilt for choice.

Why is Australia still arguing about the science when other countries like Germany have accepted this and are dealing with adaptation. We are similar to UK and USA and not Europe. Partly about straight politics, impact of weather and seasons, breaking of the drought, the broader standing of science in Australia and science education in this country.

We need a closer engagement with government departments. Need closer interaction with academia. A place for contract arrangements, useful interaction at informal end as well as formal end. Difficult to talk early enough about what the problem is and engage with people who can help with answering the difficult issues. Need to look at the timelines as well. They can't wait for several years to get an answer to questions, often have to provide information in 3 days or maybe 3 months but not 3 years.

Neil Hamilton, CEO of Earthwatch Rethinking opportunities for field-based university teaching and research. This is a conservative NGO whose role is to inspire people founded 1971, now 50 countries, 70 projects, 3500 volunteers per year and does science projects. Largest private conservation funded in the world.

Promotes sustainability by supporting education and research, and engaging people to inspire action. Believe in conserving biodiversity and integrity of life on earth. Inspiring people with the beauty of nature, the power to understand and ability to contribute. Cover a wide range of projects. Do a lot of work on marine plastics. Take ordinary people on expeditions to extraordinary places to work with scientists on real biodiversity conservation research projects. Work on species discovery project.

Four priority areas: ecosystems, climate change, oceans and cultural heritage. In Australia, an important focus with 14 projects form rainforest to reef, urban biodiversity to remote communities. 2/3 of what they do is done with the corporate sector.

Now looking to rethink their model, rate of change in the community, government, companies too are slow. Rates of change are accelerating. In the artic you can watch the change happening. Have a scientific reference group, try to get observations over a long time frame to observe certain species. This is a really good UG teaching tool and they are already working with 4 universities. Need to find the right people who want to embed the program into their units over many years. Allows every Australian to become a climate change scientists by observing and recording (using iPhone app) changes in nature. Need to get millions of observations for this to work.

Have projects for working with a scientist for a day – short expeditions near capital cities. Key

ingredient of interaction with universities is the longer expeditions. Live and work alongside scientists, this is not a holiday but work. We look at what makes a good project – iconic species, locations, science rigour and peer review, robust suitable methodology, genuine need for volunteer input, quality control, PI good communicator. They fund these projects, help people to do fieldwork that they otherwise would not be able to do. What should Earthwatch be doing to create the change in all sectors of the community to put us on a sustainable pathway. Work with public, community, companies, schools, i.e. looking at plastics on beaches – impact on species and environment, hard to make this work with general public. NAB is one of their funders, they are carbon neutral but also largest funder of coal fired power stations – how can they work with NAB to look at supply chain. They are second largest land holder in the country and they have identified risks from environmental /ecosystem risks from their holdings. Urban form is harder to get across to a broader audience. Need to ensure that any project would attract an audience / project participants. If they could set up a program for many universities if could be possible to attract corporate funder. You would need to use this experience for credit for the unis involved. He is interested to look into this, but must have many universities involved. What about long term monitoring projects using volunteers with scientists on a long-term basis. This is relatively easy to do. Everyone knows the long-term data sets are increasingly difficulty to obtain – we would be very interested in talking about this. Earthwatch needs academic rigour, assurance of students Could look at fieldwork programs across our group and cross credit. Within this group, we should be able to trust the work level that is being covered and the % of a semester unit. Must look at UG and PG level of these expeditions ACEDD needs to find a way to communicate back with Earthwatch for an ongoing relationship and Chair to follow up collaboration. It would be good for them to list the projects they undertake and the kind of tasks required. possible He can be contacted through their website, or nhamilton@eartwatch.com.au collaboration Launch of ACEDD-Presentation and Q & A session with John Williams, Tim Stubbs & Ann Milligan. sponsored Coal

Seam Gas Report: public media		
event.		
Aidan Byrne,	He used to be Dean of Science at ANU (physicists)	
CEO Australian	ARC is there to provide advice to government, look after the National competitive grants and run the	
Research Council.	ERA process.	
	Government investment in R&D, ARC is only 9% unis 21% tax concessions to industry 24% CSRIO 8% NHMRC 8% CRC 2	
	ARC funding: discovery 43% future fellowships 17% linkage 18% centres excellence 8% discovery ECR 3% linkage infrastructure equipment and facilities 5%	
	Research sector changed and challenges: grants – best thing with money available, DECRAs DORAs,	
	open access, health & medical research, evaluating impact, defence trade control bill, Budgets and politics	
	This year is the last round of the future fellowships. In the future, the sector will have to find salaries	
	for 1000 people currently funded by this money. After this time, these people will be competing	
	with others for discovery grants, so the success rate/return rate is likely to change.	
	Have revised the funding rules to include publication requirements: 12 months after publishing the	
	work, you must put the results in a public access repository.	
	Being careful about double dipping in the system, i.e. applying for ARC and NHMRC grants Impact is really important (just finished ERA process)	
	ARC funding for environmental science -208.4\$M since 2008 into what they think is Environmental	
	Science (3%) is a reasonable amount for a discipline, two centres of excellence coral reef studies and environmental decisions	
	In Environmental Science –our partnership programs are stronger than other disciplines ERA 2010 – 05 Environmental Science FTE 665 % rated a.w.s 83% average rating 3.6 research income 237,077,004	
	This is significantly bigger than some other discipline like maths history & Architecture 501 average rating 4.0 – very few universities evaluated	
	502 3.3 many universities, lots of income	
	503 4.3 not too many group but good income 599 no units accessed	
	Promoting outcomes – providing policy advice to government, if we have good stories, then let the ARC know and they can pass this on. ARC wants to work with universities to celebrate research outcomes attained by grant recipients. They want to reinforce to parliament that investment in	

research is vital. Feeding research outcomes into dialogue on government policy is a challenge and an opportunity

Where he thinks ERA should go (2012 results out by the end of the year): to this measure academic excellence, our measures are better than other countries, rigorous process but these measures are only one aspects of what universities do. Shifted focus from volume of publications to quality of publications. Where it should go from here to make it a richer and more useful exercise, where it measures the impact. ARC are looking at how to come up with the process and set of indicators of how to measure impact. They want ERA to continue but expand to include other factors as well that better represents the landscape of what universities do.

Issues with multidisciplinary work seem to be downgraded in ERA process. This comment has also been made with respect to assessing grants in these multidisciplinary fields. They have capacity to use input from one panel into another where this extra info is require. They are thinking of creating a multidisciplinary panel. Issues with this –need people to understand how multidisciplinary research is done, rather than the discipline field itself. Could be hard to find people for this, would there be a demand for such a panel?

It's important to have the right people on the panels. He believes they have good people on these panels. Have to do some things where the impact will not be known for a decade or two. There is a demand for the ARC discovery for real multi-disciplinary work. Some universities are setting up their own internal funding panels as they can't apply for any other funding source unless its linkage funding.

Funding going through other government Depts is not being well coordinated. Need to set up national priorities and then funding would be addressed that way. This is what is being proposed, so it would only be received well if you were in that funding priority.

Believe that 75% of their work is world class or better, but we should compare us with other similar countries that we want to compare against, technologically developed countries, If this was done, we would not look anywhere near as good.

Must distinguish between multi and inter disciplinary. Believes they can deal with inter disciplinary well. With multi-disciplinary how do you demonstrate a track record, often a group would be coming together for the first time. The same thing is required for people working within a single discipline, do they have the capacity to deliver the outcomes.

Would need to create a panel that thinks about different approaches and true multi-disciplinary,

would not create a panel for a niche group. Needs about 15 people to set up a panel like this, look at what NSF is doing and in Europe. They will be talking to Monash and Melbourne universities regarding their multi-disciplinary research centres.

RQF: not in the sectors best interest to keep running ERA in the same form for ever, look at impact, however would be concerned if the government said ERA wasn't working and recommended another model or RQF. The Sector doesn't want another body, as we already have ERA, TEQSA etc

Think about ways to measure impact and what indicators exist. Panels have looked at how research offices have worked the system.

Future fellows – needs to be applied more flexibly, with the current rules that staff member is in effect being employed by the ARC. This is a terminating program. There is no Government appetite for new policy proposals at the moment, so there will be a gap before anything is likely to replace this. The new rules for this year will allow fellows to teach more. These people will become continuing staff members.

Doing a review of LIEF schemes

Why only 1 linkage round per year: Broke linkage into two parts, they are run at different time, until both are running, can't commit to run multiple rounds of the old linkage rounds until they see how it's going.

No one understands what DORAs are for, had many application from emeritus staff, need to rethink this program particularly in the light of the end of the future fellowships, will allocate 37 DORAs this year. He is going to review these.

Would like to see smaller grants with a higher success rate from some universities nd perhaps longer (more flexible) fellowships. Want to establish more ARC grants particularly for early career staff.

General Business.

TERN:

Terrestrial ecosystem research network, www.tern.org.au
Covers about 10 facilities, housed at UQ.
AusCover – one stop shop for all Australia's satellite's data. Coordinated by CSIRO

OzFlux- coordinated CSIRO flux towers (GHG)

Ecoinformatics – existing flora and fauna survey records, multi-scale plot network (Ausplots, long term ecological research network, supersites)

Soils

Coasts – coastal meta data

Two integration analysis and synthesis focus – eMast and ACEAS, www.aceas.org.au these are all joined to international networks

Some funding runs out 2013 and 2014, putting in bids to keep going until after next federal election. In other disciplines, they share all their data; this historically has not been the case in the environment field. This is research infrastructure, maybe get them to think about teaching infrastructure

It would be good to think about getting either TERN and ORAN? OzScope? to our next meeting

Council Business:

Election of officer bearers

President: Steve going on study leave July 2013, need a president elect until then. To take over from April 2013.

Treasurer:

Subscriptions:

Council is nearly in debt, annual fee requests for 2012 are about to come out. A discussion took place regarding the level of the annual fee.

We will lose the free services of our web person at the end of this month; will have to pay in future for website updates. Our main costs are: meetings, projects or sponsoring any other initiatives Members agreed for 2013 to increase to \$2500, however, we would need to show the value of this fee if universities complain about the increase.

To be discussed at the next meeting.

Website update

All members to check their profile, provide revised or updated information and a recent shoulder photo.

www.acedd.org.au

We will add CSG report to our site.

Nominations for Office bearer roles

Chair to draft summary of Council's work and ideas for the future

All members to check their profile on website and provide updates to Chair

FASTS: Letter from Science and Technology (used to be FASTS) AGM Canberra 23 November 9.30 – 2 pm, Can send a proxy for Steve. Ken and Steve Rovers will sort out who can attend on our behalf. Next meeting: Flinders University hosting – looking at somewhere outside Adelaide, will coordinate this with all SA universities. Maybe Clare valley, Barossa or McLaren vale. Will sort out the dates shortly. It will be a two day meeting and optional extra day tour.	Need to send representative to this meeting
Possible agenda items for the next meeting: Big fish trawlers – probably not enough time to investigate this for the next meeting TERN research and teaching opportunities Uranium being sold to India – could bring a speaker in Intersection of indigenous areas and development Teaching education for sustainability, is there demand from students, industry associations, industry, some universities have done something but others are struggling with this Funding structure changes for universities with a shrinking pools of students, Murray darling – someone from the authority could present to us. Invite discipline scholar if they have been appointed by then	
The chair thanked Ken and his team for hosting the meeting	