

<b>MINUTES:</b>	SANTOS COMMUNITY COMMITTEE – UPPER HUNTER Tuesday 26 March, 2013  Conference Centre, Scone Motor Inn
Attendance:	Peter Bishop, David Ross (Chair), Emma Ridley, Paula Stevenson, Graham Brown, Steve Guihot, Peter Miller, Ann Stewart, Wayne Bedggood, Glenn Toogood, Don Eather
Apology:	Cate McMahon, Sean Constable, Sam Crafter, Kathy Burns

<b>Discussion</b>	<b>Action/By Whom</b>
<b>1.</b> Welcome	The Chair opened the meeting at 6.22pm.  Apologies noted, minutes reviewed and confirmed.
<b>2. Review of Water Study</b>	DR: Hopefully everyone has had a chance to read briefing paper. Thanks to Pete Bishop, Don Eather and Steve Guihot who have met with David Ross and Glenn Toogood. We've been considering how the study needs to look and so we've proposed that firstly it'd be good just to get experts in and develop a scope. We've proposed that in scoping the water study there'd be three organisations involved. The company that would do the water study is CDM Smith which has already been engaged by Santos. Also suggested that Garry Willgoose be involved in scoping the exercise but I'm mindful of the fact that there have been issues with Garry, people in the AGL committee had issues with him. Then there'd be a third party involved in the

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independent peer review.

WB: Can I just correct that: they (AGL Hunter CCC) used Willgoose as their peer review and Willgoose was actually selected by their CCC.

DR: So there were no issues with Garry from the committee itself?

WB: He was chosen by the original CCC which was disbanded and kept on since and does his work subsequent to approval from CCC.

PB: Garry did mention (when he presented to the Upper Hunter CCC) that people were questioning his independence.

WB: That's true. There was a public forum at Brahim and his reputation was brought under question and he had to validate himself, there's a misconception that AGL employ him, AGL do pay him – the fees. They pay to State Government who then pay to Garry.

DR: We have proposed that Garry wouldn't be invited to be independent peer reviewer. Glenn had provided the water study group with a number of suggested names of experts, and the group said 'Can we bring in some of our experts if we can find some?'. There'd been suggestion of trying the water research laboratory at UNSW and Don and I had a couple of conversation around University of Canberra. Both of those organisations have said they'd be interested. It's been dragging on for 3-4 weeks, but they've not put a name up. It's been painful. In a nutshell: CDM Smith, Garry and which ever independent reviewers would be involved in scoping having also been involved in consultation with community groups in the areas. It's a pretty big step to get to and now it's time to talk to you about it. So here we are! Is everyone comfortable with what they've read, any concerns, any points of clarification?

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GT: Just to clarify the process that we're going through, firstly there'll be an assessment – where we'll use CDM Smith. Use them for groundwater modelling. CDM Smith have already done a base study for Gunnedah and Pilliga area, so we use them because they're experienced with Santos data. To try and find a new organisation – there's a lot of leg work, a lot of time educating them about the basin. There aren't many modellers in Australia, mostly from CSIRO. They've just gone through a name change. They're model reviewers, the peer review process is something completely independent that critiques a model, asks the hard questions. Comes in after the model has been built. We want to get the peer reviewer to come in early on, in consultation with sub committee, saying what does model look like for this area? Where do you set the boundary for the study, for example? It gives an understanding of the model. A model itself doesn't follow the nice straight lines of PEL 456. Key set of instructions for CDM Smith to build that model and reviewer checks it along the way. Kind of like an architect overseeing a builder.

DR: There was some confusion from the study group on how to collect data. Will the collection of data involve using both shallow bores and deep bores?

PB: When we first started discussions it was my understanding that it was shallow aquifer bores to be used, need a lot more discussion in this area in terms of technical studies. Concerns me that last meeting mentioned that there'd be use of deep aquifer monitoring bores as well which will be drilled into coal seams.

GT: There's no exploration taking place. No more exploration activity will occur until water study occurs. A study like this might come out and say limited data around Merriwa.

PB: If there's limited data you may need to use deep aquifer monitoring bores?

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DE: You say there's no information on these, there are logs from 30 years ago. When we started 12 years ago, we got them then.

GT: We understand that there's limited available, Willgoose said there's no information available.

DR: (To Don) So you're saying there's information available?

DE: There are seven bores in our valley.

GT: We want to review all information available, makes it better for us. The less information you have you have to make broad assumptions. You might have bores 220- 330 metres apart and you have to make assumptions because things can change so much in that area because you actually have no idea of what's in between. The more information the better, it's a matter of getting our hands on it.

PB: It's safe to assume that there's pretty minimal data available, and that concerns me. It would help calibrate the model if more data available. Safe to assume there will be more bores, whether they come under the term of exploration or not.

GT: You're right, simulates water in water out, when we don't have additional info, we make additional assumptions. Like a bathtub: what goes in must come out. Lots of conservatism, when you put more info in you get better results, but requires more drilling.

DR: This won't be last time we have discussion about these talks. If you're all comfortable we'd have to come back with detailed scope of work to the CCC at a later date.

SG: For the benefit of this group, it concerned me last week the difference between

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predictive model, what are you going to do with all water pumping out?

GT: In Pilliga, the water comes out two thirds as salty as sea water, it's about 10 thousands years old.

DE: That's a lot younger than around here.

GT: That's from isotope data, it's picked up a lot of salt along the way. Take that water out 19000 being total dissolved solids. Cattle can drink up to 4000, sea water is 33,000. Goes through a desalination process, like a filter, leaves a salt cake behind, we get the filtered water out and it's retested.

SG: Do you have to build a new power station to do that?

GT: There is a power station there already, that is mostly to flare off the gas. It's not cheap, but not as expensive as it used to be, much more efficient. Not as energy intensive.

DE: What other chemicals are in the water other than salt?

GT: Sodium and barium are naturally occurring, anything that 's naturally occurring in earth's crust, but there's more frequency around CSG. Don't do hydraulic fracking, so you don't get very old sea water. Some confusion in the community about shale gas, that it is fracked a lot but we're not in a shale zone around here. The important thing is that it's naturally occurring. CSG very different, sometimes you can irrigate straight onto pastures, but can't do it here.

PS: What do you do with the salt?

GT: Sodium bicarbonate. An option to use for bicarb soda, glass manufacturing, it requires an extra engineering process. You can send it to a licensed landfill, like many

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## **2. General Business**

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people do with excess salt or can do deep saline injection a couple of kilometres below the surface, that's a preferred, not publically preferred method of disposal.

PB: Is it expensive?

GT: Landfill is cheapest, injecting more expensive, lot of background work, approval processes.

PB: Does much go on up there in Queensland?

GT: Just started trials, wanted to get 12 litres per second but we're getting about 5/6 litres per second due to some chemical reactions, see what it'll accept. It is like trying to get water into a porous brick. Quite tricky.

PB: So is most going into landfill?

GT: In Queensland we do have evaporation ponds.

PS: Can't have them in NSW. Is it expensive to filter out all the hydrocarbons, and other elements? Must be very expensive.

GT: Hugely expensive one of biggest costs you have, got to do right thing by water but it's part of the economics of what we do.

SG: Requires no pumping of water in the model?

GT: Simulate what a CSG field will look like, starting to take gas out of here, in computer model, what happens – a predictive model everything reacting as though it's meant to react. But there is no physical pumping; just simulated.

PB: Still need data?

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GT: There are textbook values I can build for each of those models, but we want to know what's it really like here, because this isn't a textbook.

AS: It wouldn't be an informed model.

PS: I've spoken to John Ross - an experienced hydrologist at AGL and he emphasised Oxley Basin is unique and shouldn't be interfered with and that we don't have any knowledge of it. I came away thinking what on earth are you doing even going near this basin. If you're really going to study it, it would take you 10 years, you're here now, wanting to drill.

GT: We're in the Gunnedah basin. We do drill through the Oxley basin to get through to the Gunnedah basin.

DR: Irrespective of what basin we fall in, the bottom line is that this water study has to be thorough. Is that what you're saying (to Paula), relies on more than historical data?

GT: You are right. The Gunnedah Oxley Basin is merged together from water. There are questions about the interconnectivity of the two, the communication between Gunnedah and Oxley Basin, and this is the only real way to understand the interaction between the two basins.

DE: You don't get water out of basalt.

GT: You do around Spring Ridge.

DE: That's the alluvial east of spring ridge, the Merriwa plateau the big producing bores are out of sandstone, east in basalt and alluivals. The area changes, I don't have much to do with drillers but they'll tell you where things change.

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PS: Our focus is on the Merriwa plateau.

DR: So we'll try and capture the knowledge that Don has shown through having the meetings with the wider community. Now, rather than experts coming in and deciding how the project should look we firstly need to involve the community. Talking about bigger picture of study, are people comfortable with what's being proposed by study group so far?

ER: I'm coming into it quite late and with nervousness around any water study, we do appreciate what you're doing – it's an unenviable task scoping any sort of study. I still have a fear of what it's going to achieve, but I don't have solutions or an answer. The difficulty is that we don't have enough data, and we've got to get data, but I take Paula's point. What amount of time would Santos dedicate to a water study?

GT: There are parameters of a water study, you put more people into it you get the study done quicker. Utilising existing data, local experiences, whilst might take 6-12 months to pull together study, right amount of staff to look at historical data.

DR: Once a model has been developed, calibration needs to happen then?

GT: Make sure assumptions are really, is it x depth below the surface. May also require installing bores at different locations, if there's not the data already there.

WB: My understanding is that it would take 12-18 months to get that data.

GT: Not in the Gunnedah basin. You can't take the same amount of time. Not sure how long...

WB: Starting now to working model?

GT: Depends on how many people you put on it. Without getting into the

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technicalities of it, time is 18 months - 2years, 5 years, it's effectively just managing large data sets.

DR: If you get the independent review and the other experts to help scope the works, once the work is scoped would you have a greater sense of how long it would take?

GT: Yes.

PS: I think Emma mentioned a few meetings ago that this water study is a good opportunity for Santos to rationalise more drilling and we're just validating that. Water monitoring bores could be the same as exploration. We're giving them the imprimatur to do it.

GT: A water study is great for me, but it doesn't tell anything to a geologist looking for coal seam gas. I don't anticipate this water study to do a deep aquifer bore unless independent experts say they think they need it.

DE: From here to Coolah all got gravel beds, the shallow aquifer along the creeks, down in the sandstone, getting after out of sandstone, calling them alluvial aquifers. By what you're wanting there's aquifers if going to go down again, conjecture about how much of the water has already been in coal. Can only test to 50,000 years in Australia, it's really expensive to get it tested. Otherwise you have to go to the US.

ER: In layman's terms, because the sandstone water has potentially been filtered through coal?

DE: the 4 litres, past the Darles Creek turn, 66,000 years old, we're just not going to find out in our generation. Crucial to survival. We never used to get water, creeks would dry out but in the last 40 years everyone's getting water. It's critical we get it

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right for the whole of the valley.

GT: That's why we're putting the resources in because no one has done it before.

DE: Everyone should be chipping, in.

GT: I would love the Office of Water to do the study.

DE: The more contributing to it, the more it can be expanded.

PS: How about a motion to George Souris requesting that all stakeholders need to contribute.

WB: (To DR) Did you ever receive a request from AGL to co-sign; they were requesting that same thing for a regional water study. I'm sure we were going to contact this CCC.

DR: I'll chase up where that's at.

SG: Are we also talking Paula about the perceived independence of a Santos or an AGL or a water study commissioned by state govt?

PS: They're two separate things. So many different things going on in this valley, Santos shouldn't be doing it alone. I think we ask the Office of Water to do the study.

ER: We're all in this mess because the State Government have shirked responsibility.

GT: If you look at this broader basin totally, that's ok for Santos in here, what about the coal mine, what's the cumulative effect, Tony Windsor think tank under Federal Government that does have State Government. The difficulty for companies like Santos is that we go to the coal companies, say "give us all your data" and they tell us to keep on walking. The Queensland Government have an Office of Groundwater

DR: check on progress of letter from Margaret McDonald Hill regarding sharing costs of water study.

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Impact who have said “we’re going to own the model. You pay us to run that model and we’ll collate the data right across the state and they’re getting the whole of picture.”

AS: State government requires coal data to be shared, but not regulated to share data.

SG: And they’re the most over regulated industry in the world.

ER: How would it do that, is it groundwater interconnectivity just in their area or do you look beyond this PEL?

GT: No, the PEL isn’t the boundary. What is ground water interconnectivity, is a creek fed by ground water? Or is it coal water, so trying to understand where is that interconnectivity occurring, look at fault zones, joint structures, so that’s what the model will try and integrate as much as that information that’s available. Rely on geo physics, integrate those.

ER: So all this will be made clear in the review of the scope?

GT: Review of the scope and review of the study.

SG: These questions are the exact questions that we had. We don’t even know what the scope of the study is...

DR: We’re trying to find best way of scoping the exercise.

ER: Given lots of us have reservations about how big it should be and the time, so that we have a crack at something, one of the provisos might be that whatever we develop we make recommendation to the coal industry or Souris, to make this worthwhile, I’m involved in mining guidelines meetings, they have water audit schemes in place,

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they're integrated now, they have to share their data about water use, data and storage. But this might be a way of tackling bigger problem. Perhaps put around this scope the other things that would hinder it. As well as what we've got there, listing limitations and listing other sources of assistance i.e. coal industry because we've acknowledged, you've said the department to do the broad basin, that to me signals that what ever we produce here is half cooked.

GT: There is a case study the Namoi catchment has done. It's a broad study by multiple stakeholders and the government is at arms length. That's one of challenges is the political nature of things, it's very frustrating.

ER: For the moment we list the ideas, limitations or needs, so we're not going over this ground again, because people will say what about bigger picture. We've gone on about holistic approach.

DE: I'd like to see two coal mining companies, two gas companies, to see if we could get a multi party study.

ER: Would ICarp do it?

GT: I've spoken with them before. They did a study on water usage, there are a lot of gaps in it. Look up icarp Oct 2012, happy to bring next time, cumulative water usages in the Hunter, parts of Queensland, Namoi.

ER: Did you find it useful?

GT: When I came to look at it, had a question mark. No reference to Namoi water study.

PB: Are there Intellectual property issues with these studies?

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GT: Most of stuff provided is on formation levels and layers.

AS: We provided them with data for their modelling. Can't remember confidentiality coming into it.

GT: We thought it was an alright and robust report. Other people find holes, that's one of the problems with multi stakeholders.

PB: You don't have any issues sharing data with say AGL.

GT: Most of it is about composition of coal, nothing too sensitive with a water study.

PB: Could be if have deep aquifer bores.

GT: Depends on what it comes down to, what's the reserve here. How much gas is actually here, but that's not used for a water study.

WG: AGL are releasing all their information publicly.

SG: Are we looking for some principles, the PEL looks like a backward dog leg, it crosses over catchment boundaries, are we looking at the water impacts no matter where they may be in the PEL. For example if they cross over a number of catchments, the impact would be in that catchment, even if the PEL doesn't go into it. A water study that takes into account all those issues.

GT: Water study once we start scoping, it is like where water falls into a bathtub might have a river that it'll look at surface area, below the surface, that runs into that catchment, too, that catchment, to and define the boundary of that study. Goes miles further west

DR: If we are in situation where water group present to this wider committee, can we

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get the experts to come and speak to committee about concerns?

GT: I would expect to as an absolute minimum.

DR: If we're in pre-scope mode at moment and as SG points out, almost trying to untangle, we've got no idea what it looks like and have to thank SG, DE and PB, because I don't envy them. I want to make it clear, that they are taking these responsibilities very seriously, particularly when they may not agree with the study, so thank you. There's a lot we still don't know and going to find out when we get experts here. Are you comfortable with the concept of wider consultation that we've proposed?

ER: Yes, one it raises awareness which is key and hopefully help communicate the committee's position on it in what we're trying to achieve. I don't know if the committee can go much further because it's hard to get head around. So is the next step trying to list the limitations so that the issues we've discussed become part of that paper?

GT: I think it's a good idea because forms good set of guidelines to challenge the experts.

PM: If I had a drilling company, and had held 99.95 of NSW and had approval of government would I have to do a water study?

GT: No.

PM: It's a question that I had to bring up. I think what Santos is doing is commendable, you don't have to do it but you are. There's a lot of scepticism, I guess the thing is that you could drill holes if you want to, people forget that sometimes.

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AS: It has increased government expectation, the bar has been raised, and they will expect another organisation to do the same.

DR: This is a step by step process because we're not quite sure where it's going to take us.

PM: I think what we're doing, would just like to make the point is that they don't have to do one, but they are. Need to look in a positive light.

SG: We've got known unknowns and unknowns and unknowns.

DR: Massive and complex issue with very reasonable concerns.

ER: I have a suggestion to add to the consultation: Why we don't invite relevant government departments to be part of this consultation?

PS: Many people have tried.

ER: Taking PM's point, this is an opportunity, Santos have already identified the limitations, and the community is concerned about the lack of a holistic approach, so by getting Government buy in...

DR: Getting government to come along to the community meetings is a challenge. But I am up for it.

ER: What if we got a couple of key ones. For instance, the government got representatives of our group (HTBA) heavily involved in the Strategic Land use policy, helped progress things and made the government aware of what it actually required or needed.

DR: We have struggled in the past, are there any particular agencies?

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ER: You invite someone intimately involved in the area or a department Director General, I know the minerals council strategic work groups have had some very good broader people there. I know it's difficult, but it's a starting point.

GT: We'd be more than happy to have government involved in process, gets them more across the challenges.

ER: Maybe I'm premature, perhaps it's the wrong time to bring them in, because we don't know what we're asking them for.

WB: I think it's a great paper, very comprehensive, next step is consultation. They (the experts) will give you a list of needs, you'll tick off what's achievable, what we think and what Santos thinks, there'll be ticks and crosses and they'll be different and from there you do your study. If you want to compromise, the better the study will be. Until you have that person here, this is a good enough brief and they'll go through how comprehensive it will be and work from there.

DR: WB picked me up on how Willgoose is perceived in AGL CCC. Is there any anything that was put in place to maintain his independence?

WB: If a peer reviewer is seen to be working with a company for a period of time that independence is perceived to be gone. He's quite happy to confront AGL on issues, he reviews it and tears it to shreds, says 'this is fair', 'I refute this', 'query this'.

SG: This needs to be an auditable trail, all communications between peer reviewer and the CCC.

WB: This happens, and you get to sit there and question both of them why they're there.

DR: Speak with ER & AS regarding which people from Govt might be best to speak with regarding involvement in water study.



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SG: the chairman of this committee should be cc'd on any communication and it can be laid here for every meeting. Needs to be an auditable trail, can scrutinise potential pressure, I'm not saying there would be. It's just very transparent; every one knows who pays the bill in the end.

WB: There will be a dollar figure and that will rest on Santos as to how much want to pay.

DE: The other three players should be footing bill.

PB: The independence wasn't there with the other water study.

DR: So we'll explore that, we'll try to approach government

DE: It's the other 3 players we've got in the area

PM: I agree with all of you, it'd be great if we can have 20 people in NSW for a water study, but realistically it won't happen. Coal mines won't share information. Isn't a water study, regardless of size, something?

PM: If we can't get all of the players on board, which we won't, we still run with it.

WB: That was my point, whatever Santos do will be great.

DR: Your thoughts on SG's suggestion i.e. open and transparent communication trail – is that enough to maintain independence?

GT: From Santos' perspective we're fine.

ER: There's probably already a process established.

SG: I don't care who it goes through, just need to assure ourselves that there was

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adequate scrutiny of communication between all parties. I've worked with consultants and been a consultant and I know pressures are bought to bear.

DR: For the sake of transparency, I would like to ensure that PB and SG are also included in communications between Santos and the experts.

ER: We can amend current brief to add transparency and then decide off line how it will work.

PB: There are a few other amendments like inviting departmental staff.

SG: If we went out and spoke to all these people is this helping to scope the scope or is it the scope?

ER: This is Wayne's idea - where we need to get someone in now...

DR: While there are some additions to the paper, in principal is everyone accepting of what's been said?

GT: We had talked about having Garry Willgoose as the reviewer, in light of struggling to find people....

SG: Getting wider committee's view on whether Willgoose is right in getting the scope worked out.

GT: If you get the independent reviewer getting a difference of opinion with Wilgoose, what then?

DR: Garry is to be involved in helping give us scope.

DE: He would take particular care in getting it right with his local knowledge.

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GT: I would see Garry as a great development.

PB: Going off in two tangents, talking about a Santos only water study and the development of it still, and other direction is whether going to approach government and other interested parties.

DR: I think we're going to try and explore both.

ER: We're going to list it as a limitation, i.e. no departmental or government involvement.

WB: What's the difference in money?

PB: The limitation is your finance?

GT: That's my perception, get an independent person to say Santos you're wrong. Too limited you've got to go further than that.

DR: So we're happy with Willgoose to scope the scope. GB are you happy with this in this part of the project? Garry's role is to advise the study group on what we need to look at in regards to local matters?

GB: Well you couldn't get someone else.

DR: We'll have a person peer review the study and Garry will help from local perspective and that would be his only involvement.

GB: ok.

WB: I think GB is thinking: he doesn't have a lot of local knowledge, because there isn't local knowledge. As far as that goes, he lives in the area, he knows a bit about

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aquifers, nobody really has local knowledge.

SG: But he can say 'this is what I'd want to know'.

DE: To help us to make sure everything in process and get it drawn up.

PS: The trouble with independence is that most people are already employed by gas or CSG companies and they're making millions. Willgoose is as independent as anyone else.

DR invites AS to share Santos view on latest govt policy regarding CSG restrictions.

AS to provide a link/copy of the Government's position for the CCC.

AS: It only came out on Thursday, Santos has had a copy we're going to review that and we will comment on that – April 12. Our first look at it is that there is a possible exploration that falls within a 2km zone, so would have to possibly rethink one of our zones. We won't be drilling there. But we've only had a quick look.

PS: From what zone?

AS: A residential zone. A quick look says that we think it qualifies as residential.

GB: Can you clarify is this the ministerial note? Which one?

AS: The most recent one.

DR: What's the difference (to Graham)?

GB: I got a briefing on it, it sent a shockwave through all the irrigators,

Unknown: Is this Federal?

GB: no this is already gazetted, directly related to water. Be keen to get a copy.

Update on new government regulations required for next meeting. Santos also to supply their position on this.

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PS: Which one?

AS: Is it the one at Bunnan? Only one well left in PEL that you want approval well.

PS: I would like to know what other exploration holes you have in the pipelines?

AS: We have an exploration work programme.

PS: I would like information about pilot well that's going to be flared. Sam says you can't because there's not approval from landholder.

AS: If there is a pilot, we don't have landholder approval.

PS: Is that the Cuan site?

PS: I'm talking about an exploration well that has high methane content, and I wanted to know if that was now going to be classified as a residential zone.

AS: All wells plugged and abandoned,

PS: Have seismic studies been undertaken at Brawboy 2?

AS: Brawboy now a suspended well.

PM: (To Paula) Why would you want to know the property name?

PS: I want to know where the neighbours are, if they're going to be impacted. This is the deceit of Santos. I ask the question in relation to where we all live, you think I care who owns it.

PM: Why do you want to know? I don't care.

AS to supply list of  
current and proposed  
exploratory wells in PEL  
456

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PS: I live there.

PM: Are you going to talk to them.

PS: Why would I talk to them if they've given permission?

WB: They want to know if they are being impacted on.

GB: You'll give us a praside on, why you thought that well would be impinged by this legislation? Could you send an email of your assessment of the impact on this PEL.

Santos to email to DR  
assessment of new  
policy (and then to CCC)

AS: (Re: license extension) You get granted a permit for a maximum period of 12 years, but end of every third year, have to tell the government what you've done. When it comes around 1 month before and not greater than 2 months after you say, "this is my report and this is what I propose going forward" and you've got that right of renewal as long as completed everything to satisfaction of govt, and that you've put all securities to deal with any environmental breach.

SG: Did it include any deep aquifer monitoring bores?

GT: No. Shallow aquifer bores.

DR: At previous meetings there's been a request for evidence of CSG on land valuations, been trying to find such a report, AGL have sent a report. DR supplies copy to CCC. I would like to remind people what we have discussed previously, that this issue is a sub-set of a much larger economic issue.

AGL Land Valuations  
document to be  
discussed at next  
meeting.

AS: Pilliga update: a couple of completions about to be signed off, down to nearly last of them. Two landholder's properties are ready to sign off.

General discussion around disclosures of interest with the following protocol agreed

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upon:

- CCC Members to declare if there's a potential conflict of interest with any item on the agenda.
- Declarations of interest will be read out near start of each meeting. If there is a conflict of interest, the affected CCC Member will be required to leave meeting while that agenda item is being discussed and their absence will be minuted.

Other business:

### **3. General business**

PB: Looking at other councils, declaring their position towards CSG and its activities, would be interested to know the views of our council, and why.

WB: There are two positions which I can send to everyone. One was in submission to strategic land use.

WB: to forward statements to DR

PB: The council's role in this is changing. Looks like council might be able to put some sort of declaration as to whether an area is residential which will affect the buffer zone.

WB: Councils have been given power to approve CSG in certain areas.

PB: The National Party isn't against CSG production. Certain elements are of that persuasion.

WB: I'll send the current position statement. If asking for renewal (of Council's position) – you'll need to do that formally.

SG: If these minutes had this reflection of these discussions, if SC can highlight for

SC: To highlight the CCC's

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consideration of the D&E committee.

WB: You've got some very cash strapped councils sitting on some prime land for CSG.

ER: I'd just like to acknowledge the work put in by the water subcommittee, they've taken on a difficult task and I'd like to offer our thanks on behalf of the wider community, in case down the track they are open to criticism.

Meeting closed 8.30pm

Next meeting: May 28.

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request for information on the Council's response to the latest Government Legislation regarding CSG to the D&E committee.



**Attachment 1. Issues prioritised by the Committee Members and progress made**

	<b>Issue Prioritised</b>	<b>Progress Made</b>
<b>1.</b>	Understanding the impacts of the coal seam gas industry drilling and fracture stimulation techniques on water	<b>Well integrity presentation – Feb 2012</b>
<b>2.</b>	Identifying the need for independent peer reviews of water monitoring	
<b>3.</b>	Better communication with the community	<b>Commenced at September meeting</b>
<b>4.</b>	Providing timelines for proposed activities, including Santos activities, commercial in confidence matters and regulatory changes	
<b>5.</b>	Providing better education on the process and impacts of coal seam gas	<b>Commenced at October meeting</b>
<b>6.</b>	An understanding of the cost of the industry to the community and how this may be recovered	<b>Discussed at February meeting</b>
<b>7.</b>	Establishing baseline data of local aquifers	
<b>8.</b>	The need for independent specialists such as hydrologists and geologists to provide information	
<b>9.</b>	Understanding how value can be added to the community through this process	<b>Commenced at October meeting</b>

**Attachment 2. Actions raised by Committee Members that are not complete**

	<b>Action Raised</b>	<b>Date Raised</b>	<b>Progress Made</b>
<b>1.</b>	Committee to ensure that all communication is distributed through DR rather than through any other individual(s)	29 <sup>th</sup> November 2011	<b>Ongoing</b>
<b>2.</b>	Alternates to be briefed by their colleagues before attending any meetings, as required	29 <sup>th</sup> November 2011	<b>Ongoing</b>
<b>3.</b>	Santos to present on legislative approvals process at a future meeting	29 <sup>th</sup> November 2011	
<b>4.</b>	SC to table an REF at a future meeting	29 <sup>th</sup> November 2011	
<b>5.</b>	SC to present at a later date on the Eastern Star Gas pipeline projects once the business plan has been completed	29 <sup>th</sup> November 2011	
<b>6.</b>	DR to provide Committee Members with copies of future media releases	29 <sup>th</sup> November 2011	<b>Ongoing</b>
<b>7.</b>	Santos to report back to the Committee on the findings of the investigation in to spill	24 <sup>th</sup> January 2012	<b>Ongoing</b>
<b>8.</b>	Santos to report back on whether a prosecution is to go ahead	24 <sup>th</sup> January 2012	<b>Ongoing</b>
<b>9.</b>	Minutes to be provided to members within one to two days and members then to have five days in which to provide comments back to the Chair	24 <sup>th</sup> January 2012	<b>Ongoing</b>
<b>10.</b>	Santos to present on well integrity at next meeting	24 <sup>th</sup> January 2012	<b>Ongoing</b>
<b>11.</b>	DR to ensure there is another presentation on the impacts of CSG on water management	28 <sup>th</sup> February 2012	<b>Ongoing</b>

<b>12.</b>	DR to ensure there is a presentation on fracture stimulation in future presentations	28 <sup>th</sup> February 2012	
<b>13.</b>	Pilliga issue to remain on the agenda for March meeting	28 <sup>th</sup> February 2012	<b>Ongoing</b>
<b>14.</b>	Santos to provide before and after photos of the Brawboy 2 site at the next meeting.	27 <sup>th</sup> March 2012	<b>Ongoing</b>
<b>15.</b>	Next water management presentation to respond to the issue of geological flaws and cracks	27 <sup>th</sup> March 2012	
<b>16.</b>	Santos to provide updates on progress of organising future joint forums	27 <sup>th</sup> March 2012	
<b>17.</b>	Produce written update on work schedule in PEL 456	27 <sup>th</sup> March 2012	<b>Ongoing</b>
<b>18.</b>	Sam and Steve to discuss property values and potential impacts on neighbours	28 <sup>th</sup> August 2012	<b>Ongoing</b>
<b>19.</b>	PB and PS to discuss organising a cattle property tour with Santos	27 <sup>th</sup> March 2012	<b>Ongoing</b>
<b>20.</b>	Santos to talk to Frank Krstic and the EDO to identify what they could offer to the SCC or local solicitors	22 <sup>nd</sup> May 2012	<b>Ongoing</b>
<b>21.</b>	SC to identify Santos sites in the audit	22 <sup>nd</sup> May 2012	<b>Ongoing</b>
<b>22.</b>	Santos to contact the Knights and provide them with appropriate details (when there is a date for seismic)	22 <sup>nd</sup> May 2012	<b>Ongoing</b>
<b>23.</b>	PS and SC to discuss obtaining water quality data from landowners	22 <sup>nd</sup> May 2012	<b>Ongoing</b>
<b>24.</b>	Chair to approach Canberra Uni for a water specialist after input from GB	24 <sup>th</sup> July 2012	<b>Ongoing</b>
<b>25.</b>	Review and evaluation of whether input has been acted on to be discussed at November meeting	25 <sup>th</sup> September 2012	
<b>26.</b>	DR to investigate seeking presenters with positive and negative	23 <sup>rd</sup> October	<b>Ongoing</b>

	experiences of having CSG on their land	2012	
<b>27.</b>	SC to obtain non-commercial in confidence information on Santos' strategic views for Upper Hunter	23 <sup>rd</sup> October 2012	<b>Complete</b>
<b>28.</b>	PB to contact farmer about his experience in Surat Basin	23 <sup>rd</sup> October 2012	
<b>29.</b>	SC to identify with Tony Pickard just what data he is referring to. SC to then report back to committee on this	23 <sup>rd</sup> October 2012	<b>Ongoing</b>

**Attachment 3. Actions raised by Committee Members that have been completed**

	<b>Action Raised</b>	<b>Date Raised</b>	<b>Progress Made</b>
<b>1.</b>	SC to provide DR with copy of presentation to go out with minutes	29 <sup>th</sup> November 2011	<b>Completed</b>
<b>2.</b>	SC to provide information on crops grown (at site in presentation) and the details of the water content of the treated water	29 <sup>th</sup> November 2011	<b>Completed</b>
<b>3.</b>	DR to contact Committee members to determine the date for the next meeting.	29 <sup>th</sup> November 2011	<b>Completed</b>
<b>4.</b>	DR to forward Kathy a copy of the previous minutes	24 <sup>th</sup> January 2012	<b>Completed</b>
<b>5.</b>	CM to source information on costs of running a desalination plant	24 <sup>th</sup> January 2012	<b>Completed</b>
<b>6.</b>	CM to report back on Santos' policy on community investment	24 <sup>th</sup> January 2012	<b>Completed</b>
<b>7.</b>	CM to report back on progress on joint water forum	24 <sup>th</sup> January 2012	<b>Completed</b>
<b>8.</b>	DR to contact Committee members to determine the date for the next meeting	24 <sup>th</sup> January 2012	<b>Completed</b>
<b>9.</b>	SC to resolve Santos mail out database	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>10.</b>	SC to provide DR with possible government contacts for presentation	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>11.</b>	DR to discuss list of government contacts with PS	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>12.</b>	DR to invite government regulator to present at next meeting	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>13.</b>	SC to respond to Foreign Correspondent story at March meeting	28 <sup>th</sup> February	<b>Completed</b>

		2012	
<b>14.</b>	Electronic copy of Santos report on the Pilliga to be forwarded to the Committee	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>15.</b>	Hard copy of Santos report on the Pilliga to be sent to Don Eather	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>16.</b>	SC to identify the date for licence renewal	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>17.</b>	Santos to present on well abandonment at March meeting	28 <sup>th</sup> February 2012	<b>Completed</b>
<b>18.</b>	DR to invite WB, MJ and PB to present their views on the land use forums at the next meeting	27 <sup>th</sup> March 2012	<b>Completed</b>
<b>19.</b>	DR to talk to Julie Moloney about landowner rights	27 <sup>th</sup> March 2012	<b>Completed</b>
<b>20.</b>	DR to talk to Julie Moloney about responding to road sales in April meeting	27 <sup>th</sup> March 2012	<b>Completed</b>
<b>21.</b>	DR to ensure that staging of works to be a set agenda item	27 <sup>th</sup> March 2012	<b>Completed</b>
<b>22.</b>	MJ to provide DR with background information on enquiry for DR to forward to committee	24 <sup>th</sup> April 2012	<b>Completed</b>
<b>23.</b>	Santos to invite water specialist to present at next meeting	29 <sup>th</sup> November 2011	<b>Completed</b>
<b>24.</b>	Liz to forward Committee Charter to Michael J for Council	28 <sup>th</sup> August 2012	<b>Completed</b>
<b>25.</b>	Santos to consider appointing an independent consultant to assist landholders with what information is available to them during negotiation	24 <sup>th</sup> April 2012	<b>Completed</b>
<b>26.</b>	Liz to also email Steve Guihot a copy of the Update	24 <sup>th</sup> April 2012	<b>Completed</b>
<b>27.</b>	Santos to provide CCC with copy of its submission	24 <sup>th</sup> April 2012	<b>Completed</b>

<b>28.</b>	SC to find out who approached Santos for rodeo sponsorship	22 <sup>nd</sup> May 2012	<b>Completed</b>
<b>29.</b>	SC to identify the sponsorship contribution Santos has made locally	22 <sup>nd</sup> May 2012	<b>Completed</b>
<b>30.</b>	Santos to consider how to communicate landholder negotiations to general public while maintaining the privacy of individuals	22 <sup>nd</sup> May 2012	<b>Completed</b>
<b>31.</b>	Santos or DR to contact John Ross, Gavin Mud or Phillip Pells to present on local hydrogeology	22 <sup>nd</sup> May 2012	<b>Completed</b>
<b>32.</b>	Mark to discuss with Santos compensation for neighbours under the new compensation package	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>33.</b>	Mark to get the conversion rates of roads to drill pad areas.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>34.</b>	Mark to ensure obligations to make good are included in compensation promotional materials	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>35.</b>	CM to investigate if Santos is aware of these companies.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>36.</b>	MJ and WB to call their insurance companies re: action 38	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>37.</b>	CM to find out when a storage pond becomes an evaporation pond.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>38.</b>	CM to find out where the storage pond will be located in Bunnan.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>39.</b>	CM to find out the names of the seams being targeted in the Bunnan area.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>40.</b>	CM to review newsletter mailing list and name of the newsletter	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>41.</b>	Santos to go to government to ask for accurate mapping of the region to be undertaken by government.	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>42.</b>	Chair to write to AGL Community Committee Chair offering support on behalf of the Santos Committee	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>43.</b>	DE and GB to forward names to the Chair for independent water specialists within one week of July meeting.	24 <sup>th</sup> July 2012	<b>Completed</b>

<b>44.</b>	GB to provide names of insurance companies who do not insure properties with CSG activities	24 <sup>th</sup> July 2012	<b>Completed</b>
<b>45.</b>	AS to send ESG2 Environmental Assessment guidelines to David to distribute	25 <sup>th</sup> September 2012	<b>Completed</b>
<b>46.</b>	AS to send ESG2 Environmental Assessment guidelines to David to distribute.	26 September 2012	<b>Completed</b>
<b>47.</b>	Discussion on where the CCC is heading to be held in November meeting	26 September	<b>Completed</b>
<b>48.</b>	DR to contact government and Margaret McDonald-Hill to discuss sending meeting minutes to government.	26 September 2012	<b>Completed</b>
<b>49.</b>	Hardcopies of Ann's presentation to be provided with the minutes	26 September 2012	<b>Completed</b>
<b>50.</b>	Santos to approach Hunter Valley Research Association	25 <sup>th</sup> September 2012	<b>Complete</b>
<b>51.</b>	WB to ask HTBA for a representative for the CCC	25 <sup>th</sup> September 2012	<b>Complete</b>
<b>52.</b>	CM to identify if copies were mailed out to GB	23 <sup>rd</sup> October 2012	<b>Complete</b>
<b>53.</b>	CM: to ask if HVRF can supply their questions to SCC-UH prior to survey.	23 <sup>rd</sup> October 2012	<b>Complete</b>
<b>54.</b>	CM: to ask about the feasibility of HVRF undertaking a survey specific to CSG	23 <sup>rd</sup> October 2012	<b>Complete</b>
<b>55.</b>	DR to provide CCC with ASX link from Dart website	10 December 2012	<b>Completed</b>



<b>56.</b>	DR to issue HVRF survey results to CCC members	10 December 2012	<b>Completed</b>
<b>57.</b>	CM to investigate if a CSG specific survey can be conducted and costings for this.	10 December 2012	<b>Completed</b>
<b>58.</b>	Glenn Toogood presentation to be forwarded to CCC members	10 December 2012	<b>Completed</b>
<b>59.</b>	DR to gauge CCC members interest in forming subcommittee to provide feedback for Santos groundwater study	10 December 2012	<b>Completed</b>
<b>55.</b>	Santos to consult with Dart to see if they can supply the UH-SCC with a copy of REF in the next quarter.	10 December 2012	<b>Ongoing</b>
<b>56.</b>	DR to forward PB's summary of water sub committee meeting notes to CCC.	5 February 2013	<b>Completed</b>
<b>57.</b>	Water subcommittee to prepare draft scope for study for presentation at next meeting.	5 February 2013	<b>Ongoing</b>
<b>58.</b>	Santos to supply picture of the proposed ESG locations	5 February 2013	<b>Completed</b>
<b>59.</b>	Santos to bring EOFY year forms for travel reimbursement to next meeting	5 February 2013	<b>Completed</b>
<b>60.</b>	Relevant council documents related to 'independence'. Register of interest to be collated	5 February 2013	<b>Completed</b>
<b>61.</b>	DR to invite Upper Hunter Research Foundation to March 26 meeting for a briefing on what the CCC hopes to achieve from the next survey	5 February 2013	<b>Ongoing</b>

<b>62.</b>	CM to supply an outline of CSG related investment in Gunnedah/Narrabri area	5 February	<b>Ongoing</b>
<b>63.</b>	PS has requested of Santos a list of current & proposed exploratory well in PEL 456 as soon as possible	26 March	
<b>64.</b>	DR to check on progress of letter from Margaret McDonald Hill regarding sharing costs of water study	26 March	
<b>65.</b>	DR to speak with ER & AS regarding which people from Govt might be best to speak with regarding involvement in water study	26 March	
<b>66.</b>	AS to supply a link to CCC of the Government's latest CSG legislation and Santos' position on this	26 March	
<b>67.</b>	AS to supply list of current and proposed exploratory wells in PEL 456	26 March	
<b>68.</b>	AGL Land Valuations document to be discussed at next meeting.	26 March	
<b>69.</b>	SC: To highlight the CCC's request for information on the Councils response to the latest Government Legislation regarding CSG to the D&E committee.	26 March	