



**NB: Note that minutes are paraphrased to an extent and may not exactly match actual statements.**

Project	Gloucester Coal Seam Gas Project	From	Michael Ulph
Subject	Community Consultative Committee	Tel	4910 7788
Venue/Date/Time	Thursday 2nd May Gloucester Country Club, 10.00am – 12.00noon	Job No	21/17714
Copies to	All attendees & apologies		
Attendees	Ian Shaw – AGL Lands Officer Therese Ryan – AGL Community Relations Manager Dr Gerald McCalden – The Gloucester Project Clr Tony McKenzie – Dungog Shire Council Clr Aled Hogget – Gloucester Shire Council Ed Robinson – Lower Waukivory Residents Group Rod Williams – Community Representative Clr Karen Hutchinson – Great Lakes Council Anna Kaliska – Mid Coast Water Michael Ulph – GHD (Facilitator) Aaron Klasen – GHD (Assistant Facilitator) Alex Kennedy-Clark – AGL Project Manager Melissa Ryan – AGL Project Administrator Gavin Comber – AGL Geologist Graham Gardner – Gloucester Shire Council Jerry Germon – Community Representative	Apologies	David Mitchell – Avon Valley Landcare Clr David West – Mid Coast Water Lee McElroy – Port Stephens Council Lisa Schiff – Great Lakes Council Toni Laurie – AGL Land and Approvals Manager Norma Fisher – Director, Forster LALC Ray Dawes – Barrington Gloucester Stroud Preservation Alliance

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## 1. Introductions

## Action

### Michael Ulph

*Welcome and Acknowledgement of Country*

Meeting commenced at 10:10 am

Michael advised that he did not receive any apologies.

Therese Ryan advised that Toni Laurie is away sick and sends her apologies.

Gerald McCalden advised that Ray Dawes sends his apologies.

Anna Kaliska advised that Clr David West sends his apologies.

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Clr Karen Hutchinson advised that Lisa Schiff sends her apologies.

Michael welcomed Gavin Comber, Geologist for AGL, who will be able to answer questions about the aeromagnetic survey today.

Michael mentioned that Alex Kennedy-Clark, Project Manager, and Melissa Ryan, Project Administrator, AGL, will be arriving shortly.

Michael welcomed Jerry Germon back to the CCC, now taking Tim Hickman's place as a Community Representative.

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## 2. Meeting agenda

- Welcome, apologies, introductions
- Action items from previous meetings
- Project Update (Therese Ryan on behalf of Toni Laurie)
- Community Engagement update (Therese Ryan)
- Morning tea break
- General business
- Next meeting & close of formal proceedings

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## 3. Action items from the last meeting

Action items from the previous CCC were reviewed. The status of these action items were confirmed for the CCC.

**Last meeting minutes were moved as true and correct:** Rod Williams moved, Clr Karen Hutchinson seconded.

- **Action 1: Michael to circulate the AGL statement to the CCC**

Complete – Michael circulated the AGL statement to the CCC on 21 February, 2013.

- **Action 2: Toni to provide printed copies of EPBC to the CCC**

Complete – Toni provided printed copies of the EPBC to the CCC on 20 February, 2013.

*Michael asked the CCC if there were any other questions in relation to the action items or previous meeting minutes.*

*Motion that the previous minutes are a true and correct record. Moved by Rod Williams, seconded by Karen Hutchinson.*



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#### **4. Project update:**

Therese Ryan (AGL) provided an update of the Gloucester gas project to the CCC, on behalf of Toni Laurie and John Ross (water).

#### **Water update:**

- The report from the pump test that was conducted at Tiedman's (Stratford 4) is now in preparation.
- Waukivory drilling and the pilot testing program, which is part of the quarterly monitoring program (the collection of baseline data) is in front of the proposed fracture stimulation and flow testing program.
- In terms of water monitoring; the new monitoring bore site towards Gloucester is planned for drilling May to June, 2013.
- The new monitoring bore site towards Wards River is planned for drilling May to June, 2013.
- The new monitoring bore sites close to Waukivory 3 and Faulkland 3 are planned for drilling May to June 2013.
- The 2012 water balance study is complete (the basin-wide update is underway).
- An updated conceptual report has been completed and the release is pending.
- Surface water hydrology studies have commenced.
- Scoping has been completed for the phase three numerical groundwater model, and is expected to start May 2013.
- Regarding property surveys; tenders have been received and still seeking Council support for that project. Still waiting on a response from Council. Not sure on a timeframe at this stage.
- In terms of the irrigation trial; the civil works and soil improvement program has been completed. The linear movement irrigator has been commissioned. The baseline water monitoring program has been completed and the release of this is pending. The baseline soils monitoring program has commenced and the baseline report is likely to be released in May, 2013. The produced water dam is completed. The irrigation program has commenced. The crops have been sown and the irrigator was running earlier this week. The first crop to go in was forage Triticale followed later by Lucerne which is now at two-leaf stage.

#### **Project update:**

- An update was sent out on Waukivory 3; the work over rig has now arrived.
- At Pontilands 3, the core hole drilling is still continuing as of this morning we are at around...



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Ian: I believe 884m. It was planned to go to 1050m, but the formations are coming up a little higher than expected, so it will likely terminate at around 1010-1020 metres. It is expected that this will be complete by Wednesday of next week.

- Craven 6 is currently on pump.

Ian: It went on pump a little while back and there was a slight noise issue which has been fixed and it is producing some water, so it is in that gas-water production phase.

- The aeromagnetic survey will recommence at the end of the month. There will be a community information session on May 20 at Farley Gates and the survey should start on May 21, 2013. There will be another community update to go out next week.
- REF's for Waukivory, Wards River and Wisemantles are still being worked on at this stage.

Michael welcomed Alex Kennedy-Clark and Melissa Ryan, who joined the meeting at 10:18am.

*Michael asked if there were any questions about John Ross' update.*

**CCC: You mentioned the numerical model. Is that now to be referred to as phase 3?**

Ian: Part of our approval conditions is that we prepare a numerical model and that is being prepared now. That equates with our State approval condition and I believe was brought into the Federal conditions as well. That will come out as a numerical model. As Therese said, there was an update of the other model and they are just starting to work on that now.

**CCC: So, what area is covered by this numerical model?**

Ian: John's comment is that it is a basin wide model.

Therese: I can find out the details of that for you.

**CCC: A map or a verbal description of the area would be great.**

**ACTION: Therese Ryan to provide CCC with a map of the area covered by the numerical model.**

**CCC: There has been confusion in the past about which areas were covered.**

**CCC: Has the Federal government had any interaction with AGL regarding that study? For their bioregional study, they spoke with**

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**Mid-Coast (Water) and Gloucester Council last week. It was a basin examination of surface and groundwater, in relation to current and future mining activity. What we all need to understand is what is the interaction between what they are studying and what AGL is studying, and how this might get resolved.**

Michael: So, your question is what has been the interaction between AGL and the government regarding that?

**CCC: That is correct. It would be good to have some idea of the interaction between these various bodies of work.**

Ian: I am not certain of a bioregional request, although there were certainly a series of questions asked by the NSW Chief Scientist. I know that there was data flowing into the NSW Chief Scientist's review, which included water studies and the like, across more than just this project. We will have to take it on notice and get that back to you.

**ACTION: AGL to report on interaction between themselves and the Federal Government regarding the bioregional study.**

Michael: Okay. Any other questions about John's update?

**CCC: Did you mention Therese, that there is a request in to frack the Waukivory wells?**

Therese: The REF hasn't been lodged yet. It should be submitted soon.

**CCC: And for the new aeromagnetic survey, you will be coming out with another fact sheet?**

Therese: Yes. I am just getting that set-up at the moment.

**CCC: Where is Craven 6?**

Ian: It is the one on the entrance to Stratford Coal, just where you turn in, between the entrance road and Allan Isaac's boundary. It was drilled in around 2009.

Michael: Any further questions regarding that report?

**CCC: Can I just clarify number of wells?**

Ian: There are 12 completed wells (meaning drilled and fracked). And we have 4 wells in the Waukivory pilot, that will become a production pilot. All other holes drilled are core holes or chip holes for information.



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**CCC: And water monitoring?**

Ian: As Therese said, there are 30 plus, and there are four to go in east of town. At Waukivory 3 and Forbesdale 3, there will be water monitoring bores in that location as well. That's what Therese was referring to would be drilled later this year. You will recall that the independent peer reviewer wanted a bore drilled down the bottom of the basin and that will be implemented later on. And also be aware of the changes in the rules that have occurred in the last short period of time. Some of these things that were planned, we cannot now give answers, as we are waiting on government input.

Michael: Is there anything else about the project update?

**CCC: I was going to ask if we could visit the site of the irrigation trials.**

Therese: I can certainly arrange that.

Ian: We are happy to show you today.

**CCC: It would be better to leave it a month.**

Therese: After the June meeting perhaps we could visit that one.

Michael: I am conscious that Gavin is here with us today, so are there any questions about the aeromagnetic survey?

**CCC: Well, we don't know a lot about it, other than that it is going to go where the blimp went. Other than that, what do we know about it?**

Therese: The same data as we discussed at the August meeting will be collected.

**CCC: The critical question for me is what height?**

Gavin: It will be 40 metres.

**CCC: For a helicopter?**

Gavin: Yes.

Therese: There will be exclusion zones around houses and we are not

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flying the survey over Craven, Stratford and Wards River. It will stop to the north of Stroud Road and there will be exclusion zones, as we said, around houses in the valley.

**CCC: How big will the exclusion zones be?**

Gavin: Around Gloucester there will be a 300 metre buffer and around Stratford is another 300 to 600 metre buffer. Around houses it will be a 100 metre buffer.

**CCC: Is that 100 metres diameter or radius?**

Gavin: That is a 100 metre radius.

**CCC: And that is across the whole basin?**

Gavin: Yes.

**CCC: Can I just ask, so this helicopter thing has to be done?**

Gavin: Yes. It will give us an indication of where the faults are and it will help us avoid an area that may produce carbon dioxide. This will also help us delineate things in our seismic model and that will also go into our basin-wide water model. So, basically, we can obtain a better understanding of the layers.

**CCC: Okay, so what time will the helicopter be flying around?**

Gavin: There will be 17 days of acquisition. That is quite a conservative figure due to weather. They do cover about 300 kilometres a day. Up and down the side of Gloucester it will probably be about a day of acquisition. And that's right down to the Forbesdale Estate.

**CCC: So it will be a similar sort of noise as when Essential Energy do their line checks with the helicopter?**

Gavin: Yes, that is our understanding.

**CCC: I would suggest though that when they go over power lines, that this will be much higher, because the lines are already 20 metres in the air.**



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**CCC: So you have got permission to fly that low?**

Gavin: Yes, it's under the CASA regulations.

Ian: And also, the chief pilot has just returned from Tasmania where he was doing bushfire fighting. But yes, it's all covered under CASA regulations, which is their responsibility to acquire those approvals.

**CCC: What time of the day will they be flying?**

Gavin: During the week, they will be flying between 9am and 4pm. And on Saturdays, it will be 9am to 1pm. There will be no flying on Sundays or public holidays. With regards to Gloucester and around town, we will also avoid weekends and avoid early or late starts.

**CCC: I think the major difference between this and the power line surveys is that this is going to be flown on a grid pattern, whereas power line surveys are linear. Obviously, it is going to have a much bigger effect.**

**CCC: It will be nothing compared to the fire brigade. I don't think it will be anything different noise wise.**

**CCC: I think the fire brigade fly a bit higher than 40 metres.**

**CCC: So, how do we stop it?**

Michael: I'm not sure what you mean by that? Who is the 'we' in that question, or is that directed at AGL?

**CCC: It's very well to say we don't like this, but how do we stop it?**

**CCC: I was going to say, how vital is it to retrieve this data? I guess what do we get out of this that we cannot get this out of 2-D data? We are all hungry for information, but we are all saying that AGL doesn't have the information that they need, yet we are not happy to provide them access. Between all of the data collections that have been done, is there a more productive method and should we focus on that?**

Gavin: Normally with any exploration project you will actually do the aeromagnetic surveys; it gives you a very good picture of what's under

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the ground. And, as I said, this ties in well with the seismic data to give us a better model. Between the two pictures, they will come together to give us a really good idea of what is happening beneath. That will also go in with the water model and I am guessing that it will go into things like the numerical model. Once we get a better understanding of what's under there, then we can run the project better. Because, when it's flying the pattern, it will pick up different heights of the basin rocks. And, it will also pick-up igneous bodies which will help us stop drilling wells that will produce carbon dioxide, which nobody wants.

Michael: Thank you Gavin.

**CCC: I guess I was wondering how terminal the problems were with the blimp? My concern is about how my animals will react to the helicopter as opposed to the blimp. Is it not possible to collect this on the ground, or are the problems with the blimp that serious that we can't have it back?**

Therese: We made the decision not to proceed with that based on the issues that we had, so now the next option is the helicopter.

**CCC: So it is not possible to do this on the ground?**

Therese: Not for this survey.

**CCC: What is the noise rating of the helicopter at 40 metres?**

Gavin: At 300 metres away from the town, it will be 70dB.

**CCC: And what about when it goes over the top of my cattle?**

Gavin: I believe it will be around 80-85dB.

**CCC: So, that's almost a quadrupling of noise.**

**CCC: AGL have a dilemma. We have a community that has concerns. We have to be comfortable with the trade-offs, as we need the information. If we really need the information that we would need to feel comfortable, then AGL need to determine what they need to do and where they need to do it. I cannot see any other alternatives. Everyone's cattle will react differently. Worst case scenario, some animals will react badly. What is the standard from AGL?**



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Ian: Well, a couple of things. A helicopter came over my property the other week and the cattle did not move. And, as you say, there will be variations. The chief pilot is also experienced as a mustering pilot and watches the cattle as he moves, to make it satisfactory for them. We cannot say how they will react exactly. It is very variable. The speed of movement is "it's there and it's gone". The chief pilot suggested that they are comfortable.

**CCC: Regarding my cattle, I don't expect is to cause any major problems.**

**CCC: How long will they be hovering?**

Gavin: They will not be hovering. They travel at approx 90-100km/h.

**CCC: So they don't hover at all?**

Gavin: No.

Ian: From a personal point of view, I went out and observed a helicopter operating under these parameters before the original blimp decision, and it was not distracting. But different reactions are possible.

**CCC: If you had two complaints whilst the blimp was running such a short period of time, and now you are going to do this over 17 days, how are you going to take care of people who are out mustering?**

Ian: This is where we would hope that communication will come in from the community to help us manage that.

**CCC: Just from the public perspective, this is a really good way of annoying a lot of people as it will be really in their face.**

Ian: That is why we went with the blimp initially and tried very hard to do whatever possible. The decision was then made by people who sit much higher than us, that they weren't prepared to continue with the blimp.

**CCC: I guess it is not best case scenario, but I am happy to get more concrete data. I am first one to put my hand up. It is more the actual sight of the aircraft, not the noise.**



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**CCC: Well, I believe that at 40 metres, the noise will be pretty bad, and now they're raising it to 80-85db. It's just madness.**

**CCC: I think if it could be avoided, that would be good, but the information is needed. But I agree that it will only exacerbate the ill-feeling out there in the community.**

**CCC: How critical is it that it is recorded at 40 metres?**

Gavin: We did some noise testing, but you don't gain any real benefits noise-wise by flying higher.

**CCC: I would be a bit dubious about that, but anyway. How important is the height to the data you recover?**

Gavin: The higher you go, the less data you get in terms of reduced resolution. If you were to go up to 60 metres, there is not a great deal of noise reduction, and you lose resolution in your data.

**CCC: So you are going to have to vary your height over the varying geography.**

Gavin: Yes, in the steep valleys we will and the pilot will also do a reconnaissance over the area before the survey.

**CCC: The feeling of this meeting is that the community are against it. What is the consequence of the community saying that we don't want you to do this?**

Ian: We feel we need the information for our models, and we are trying to address loud demands about information for the community.

**CCC: I don't believe that the feeling of the meeting is that we don't want it. I believe that we need the information to rule out the variables and the guesswork. This is what the community wants: information.**

**CCC: At least once it is done it is done. It may not even take 17 days.**

**CCC: I would imagine that for the people you are flying over it's not good. I think that at 40 metres, the cattle are going to run and I just want to know where to send the litigation.**

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**CCC: Who wears the responsibility? The operator or AGL?**

Ian: AGL. And that is a risk that AGL understands.

**CCC: I think that the community really do want this information and the more that AGL can have, the better things are going to be. I believe that if you push the data angle in your communication materials this would assist greatly.**

**CCC: What sort of info are you going to provide after this and how soon after the work, will this be coming out?**

Gavin: We have heard this a lot before at community meetings. We will receive the data after approximately one month and this will then be sent off to another company for them to have a look at and integrate it with our existing models. That could take another one to two months. It will take some time for the report to come back.

**CCC: I think at that point, that's when you could do some really good public relations with the community.**

**CCC: At the moment, people do not understand what is happening and it could be a good tool to use with the community. I was looking forward to the blimp and was intrigued by it.**

**CCC: I just think that out of this meeting, it can go into the community in two ways; it can go out as a positive or a negative thing. What I am hearing, is that as much as it has its negative impacts, taking this data out into the community could be a good thing.**

Michael: Any other comments or questions?

**CCC: I would like more information about how the whole basin is built and how the work will be used to update the hydrogeological model. The hydrogeological model is only a small portion of the basin and it would be interesting to us to know the changes in the model.**

Ian: That will happen once the data is accumulated. John Ross would be best to provide that information.



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Michael: There are three parts to that question. The first part is what reports will come out of the work. The second is when, and the third is how will that update the hydrogeological model. Perhaps this should go down as an action. If they can't be answered now, would John be able to provide a response?

**Action: John Ross to provide answers to what reports will come out of the work, when, and how will this update the hydrogeological model.**

**CCC: There is an issue coming out of that for me, it would be good to align this data with data from the Chief Scientist.**

Ian: My understanding is that the Chief Scientist has sent several requests along that line. I am not aware of the bioregional scenario as yet, but I guess we can put that down as an action.

Michael: Is there anything else?

Break for morning tea: 10:56am

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## 5. Community Engagement Update – Therese Ryan

Therese provided an update to the CCC on all the recent community engagement events. This included:

- A number of updates have been distributed through the papers, as well as via email through Michael Ulph, including:
    - Update on Commonwealth approvals.
    - Pontilands core hole works program.
    - Suspension of aeromagnetic surveys.
    - Response to media coverage regarding CSG approvals and industry in general.
    - Update about exploration program: Pontilands and Waukivory 3, as well as the community meeting and Pony Club sponsorship.
  - Letterbox drop to households along Fairbairns and Grantham Road, regarding the commencement of Pontilands core hole works.
  - Doorknocking neighbours for Pontilands core hole program.
  - Site visits with neighbours to Pontilands core hole, Waukivory 3 workover.
  - All updates are being published on the website.
  - AGL accepted an invitation from the Alliance (Barrington Gloucester Stroud Preservation Alliance - BGSPA) to speak at a public meeting on 16 May, 2013, at Soldiers Club auditorium, commencing at 7pm. John Ross and Mike Moraza will both be
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speaking on behalf of AGL. Graham Healy will also speak, along with Phillip Pells. This will be followed by a question and answer session. There will be a facilitator present.

- Details regarding the aeromagnetic program and public meeting will be distributed in the next couple of weeks.
- Another information session will be held regarding the aeromagnetic survey on 20 May, 2013. Contractors, AGL staff and the helicopter will be on site. Farley Gates has been booked for this event.

Michael: Any questions for Therese about the community update?

**CCC: Is the chopper a big rig, or a smaller type of aircraft?**

Ian: It is a jet ranger.

Michael: Any other questions?

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## **6. General Business**

Michael: Is there any general business?

**CCC: How did you go with the methane equipment?**

Therese: It has been purchased and is at Camden. They have the two units and held a community consultation event for locations. From that, they came up with a series of locations to do that work. They are starting to roll the program out at Camden.

Ian: They have it programmed initially for 12 weeks. We have asked for it to come here and we will do exactly the same as at Camden.

Therese: In terms of dates, we are not sure just yet. The community consultation event in Camden was really successful in determining some locations. I think that would be a good thing to replicate here.

**CCC: So, does AGL have a rough idea of locations?**

Ian: No. It has not yet been discussed.

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**CCC: How many locations in Camden?**

Therese: 25 nominated locations.

Michael: This is the machine that 'sniffs' for methane.

**CCC: How long does it get set up for in each location?**

Ian: I think it is a repetitive thing and they test it over a period of time. It takes a sample and then tests it, and they go to different sites over the 12 weeks.

Therese: I can ask how long it will spend at each location.

**CCC: But site and weather conditions will affect this?**

Therese: Yes.

**CCC: And it only does air, not water?**

Therese: That is correct. Only air.

Michael: Any other questions?

Michael: The next meeting is set for 27 June, 2013 at 10am. The draft minutes should be out by the end of next week.

Therese: We can take you all out to Tiedman's.

Ian: As I said before, we are also happy to take everyone out there today.

Meeting closed at 11:20am.

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**7. Next meeting**

Next meeting. June 27<sup>th</sup> at 10 am.

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**Michael Ulph**

**GHD – Stakeholder Engagement**



22 Tate Street  
Gloucester, NSW, 2422  
Australia  
Tel: - +61 2 6558 1166  
Fax: - +61 2 6558 1066

ACTION ITEMS			
Action	Responsibility	Complete	Outcome
<b>ACTION: Therese Ryan to provide CCC with a map of the area covered by the numerical model.</b>	Therese Ryan		
<b>Action: John Ross to provide answers to what reports will come out of the work, when, and how will this update the hydrogeological model.</b>	John Ross		
<b>ACTION: AGL to report on interaction between themselves and the Federal Government regarding the bioregional study.</b>	AGL		