

Actions from GISERA QLD Regional Research Advisory Committee Meeting 25 November 2016

Key

Action Open Action Due/overdue Action complete/in train

	ltem	Action	Owner	Due	Status
1.	25-11-16 ltem2a	<u>Action 1</u> : The Proponent to have a discussion with GISERA Communications to initiate early communication and engagement.	Research Proponent	30 January 2017	
2.	25-11-16 ltem 2a	Action 2: The Proponent to remove the words 'prime' and 'assurance' from proposal.	Research Proponent	6 December 2016	
3.	25-11-16 ltem 2a	<u>Action 3</u> : The Proponent to convey in the proposal the level of control the CSGP companies have on a fracc.	Research Proponent	6 December 2016	
4.	25-11-16 ltem 2a	representation on the TRG.	Research Proponent	15 December 2016	
5.	25-11-16 ltem 2c	<u>Action 5</u> : The Proponent to consider weighing cattle at commencement and end of study.	Research Proponent	8 December 2016	
6.	25-11-16 ltem 2c	· ·	Research Proponent	8 December 2016	
7.	25-11-16 ltem 2c	<u>Action 7</u> : The Proponent and GISERA Director to discuss analytical methods and experimental design.	Research Proponent & Member 14	8 December 2016	



8.	25-11-16 ltem2c	Action 8: The Proponent to consider looking at more than one site and to make clear in the proposal whether the area(s) being used undergoing development or are an operational paddock.	Research Proponent	8 December 2016
9.	25-11-16 ltem 2c	<u>Action 9</u> : The Proponent to consider incorporating a weather station and include in the proposal	Research Proponent	8 December 2016
10.	25-11-16 ltem2c	<u>Action 10</u> : The Proponent to make contact with UQ and Member 13 to discuss results from the on-farm impacts of CSG operations study and the possibility of undergraduates assisting on this project	Research Proponent	12 December 2016
11.	25-11-16 ltem 2d	Action 11: The Proponent look to include a Production Engineer on the external Review Panel.	Research Proponent	23 December 2016



Minutes GISERA QLD Regional Research Advisory Committee Meeting No. 9 Friday, 25 November 2016 Via Telephone

OPENING

The meeting of the GISERA Queensland Regional Research Advisory Committee (RRAC) was called to order at 9.10 am on Friday, 25 November 2016 via telephone by Damian Barrett, GISERA Director.

PARTICIPANTS

Damian Barrett: GISERA Director (CSIRO) Fiona McLeod: External Affairs Manager (Australia Pacific LNG) Kirsten Snyman (*QGC*) – for Patrick McKelvey Anne Bridle: Independent (former Basin Sustainability Alliance) Steve Raine: Professor of Irrigation and Soil Science in Faculty of Engineering and Surveying (University of Southern Queensland) Will Rifkin: Chair in Social Performance (CCSG and CSRM, University of Queensland) Sanjeev Pandey: A/General Manager (*Office of Groundwater Impact Assessment*) Nadine Marshall: Senior Social Scientist (CSIRO) Cameron Huddlestone-Holmes: Geosciences Team Leader, Energy (CSIRO) Dan O'Sullivan: Onshore Gas and Sustainability Advisor (CSIRO) Jizelle Khoury: GISERA Executive Officer and Secretariat (CSIRO)

Other members:

The following member did not attend the meeting, but provided written advice on the research proposals. David Freudenberger: Senior Lecturer (Fenner School of Environment and Society, Australian National University)

Apologies:

Wayne Newton: Grains President (AgForce)

ITEMS FOR DISCUSSION

- 1 Welcome, Introductions, Apologies and Adoption of Agenda
 - The GISERA Director welcomed all members to the meeting.
 - The GISERA Director raised concerns about a discussion paper published by The Australia Institute. The papers reports to have examined the make-up and governance structure of GISERA and concluded there was potential for significant



conflict of interest. These claims are unsubstantiated and there was no evidence put forward in the articles of actual conflict of interest despite the public availability of all minutes from past Research Advisory Committee meetings. The author made a number of accusations and CSIRO have identified 7 serious errors in the article. This was followed by a second article from The Australia Institute, who commissioned the Melbourne Energy Institute, on fugitive emissions from the gas industry. CSIRO have forwarded a letter to the Director of The Australia Institute identifying the errors and asking that the article be corrected. CSIRO continues to support the work being done in GISERA.

- CSIRO are going to instigate an independent review of the GISERA governance model using an independent third party to conduct the review. Results of the governance review will be published on the GISERA website.
- There will be an Energy Business Unit science review in 2017 where GISERA will be featured and that will provide a viewpoint on the science that has been undertaken in GISERA. All results will go onto the GISERA website.

2A Project Proposal - Water contamination risk assessment on hydraulic fracturing in unconventional gas extraction

Key points raised:

- This proposal has been considered by the NSW RRAC and was given approval. As there is a Queensland component to this project, this proposal will also require QLD RRAC approval. This project will look at what are the risks of hydraulic fracturing and delamination in wells in the Surat Basin and in Gunnedah.
- This project will take into account likelihoods of various risks including likelihood under current regulation and monitoring regimes?
- The objective is to take us to a point whereby considering the state regulatory controls that exist in QLD and NSW, industry practice, the geological environment for wells located in (both QLD and NSW), this project will generate a result that will provide a quantitative estimate of the actual likelihood of risks. The proponent is to make this clear in the proposal. Make sure the words in the proposal reflect this and how it differs from the NICNAS assessment.
- There are two catchments being looked at in this proposal. Is the nature of the model such that you can transpose it into other areas?
- This project will end up with high level messages that are transportable and those will be able to be picked up by the broader community including urban communities in Australia who have an interest in this topic, but then there will also be locally focused messages. They will be a set of messages that come out of each region. The model would be transportable but the parameter values would change among different locations. The model and approach is transportable.
- It will be important to start communication and engagement elements earlier in the process to allow stakeholders to see how the model is assembled (showing people into the room earlier) will add to credibility. Important to get interim information out and not wait until the end of the project before we start communicating results. The research proponent is to have a discussion with GISERA Communications to commence early engagement on communications products.



- As part of this project going ahead, not only are there timely and early interactions, but at the same time there is a focus on modern methods of conveying uncertainty.
- In Background section of proposal there is use of words 'impact on prime agricultural land' which may be from NSW Chief Scientist's report. To be widely accepted the proponent should take out the word 'prime' because there are a lot of people relying on water that are not on prime agricultural land. The proponent is to remove the word 'prime'.
- The widespread community view is that the CSG company's goal is to propagate the fraccing as far and as widely as possible in order to capture the gas and this analysis has the potential to show that there is a fair bit of control around how the companies controls the fracc. This is very important and it would be a lost opportunity if this message is not conveyed. There is precise control of the HF operation. The proposal should communicate the amount of control there is in a fracc.
- There needs to be a significant collaboration/overarching connection between this proposal and the Air, water and soil impacts of hydraulic fracturing proposal. We aim to get a comprehensive understanding across these diverse and multi-disciplinary projects to be able to make definitive statements across the potential impacts of the industry.
- The proponent to remove the word 'assurance' in the proposal.
- The impact predications will be useful to OGIA. They would like to provide input on the technical reference group (TRG) of this project. The proponent should contact Member 23 about a representative from OGIA participating on the TRG.

<u>Outcome</u>: The RRAC approved this project subject to the above comments being met to the GISERA Director's satisfaction.

Following the above discussion, it was resolved that:

<u>Action 1</u>: The Proponent to have a discussion with GISERA Communications to initiate early communication and engagement.

Action 2: The Proponent to remove the words 'prime' and 'assurance' from proposal.

<u>Action 3</u>: The Proponent to convey in the proposal the level of control the CSGP companies have on a fracc.

<u>Action 4</u>: The Proponent to contact OGIA about representation on the TRG.

2B Project Proposal - Development of guidelines for sustainable offset population sizes in plants

Key points raised:

- In regards to Biodiversity Research under GISERA, research on the design and effectiveness of offsets should be the highest priority. The science of off-setting is weak. This GISERA proposal addresses this weakness.
- Is it guaranteed to work for every species?



- There is a trade-off between generality and specificity.
- This builds on the work completed to date. This represents the only current piece of biodiversity work as all other biodiversity projects have been completed. This environmental work provides a balanced portfolio.

Outcome: The RRAC approved this project.

2C Project Proposal - CSG and Livestock - Inside the Herd

Key points raised:

- Would the cattle be weighed before the study starts and weighed again to determine live weight gains? That is a direct measure of productivity and performance and would be good if incorporated.
- Would we consider involving MLA in this project? Some involvement from MLA to endorse or be informed on what we are doing would be good. Also good to consider and incorporate any work that MLA have already done into this project.
- Concerned there is not enough detail around 'the site' problem is that there will be a different answer in different areas and particularly between the difference between the development phase vs operational phase. Tease out more detail and determine if it is possible to build in more than one site. Proposal needs more detail on the scale of what is being done are the area(s) being used undergoing development or an operational paddock.
- More information is required on analytical methods and experimental design. Will look at reconfiguring of the experimental approach and what be achieved within the budget limitations that we have.
- May be useful to focus on the solution 'if landholders are observing that their animals are changing their behaviour or not putting on enough weight' these are the sorts of solutions or strategies you could put in place.
- Does the work incorporate a weather station to capture the climatic change and wind direction? Would be important for this type of study as it could explain why the cattle are moving away from certain infrastructure. This should be clarified in the proposal.
- UQ have an agriculture research finding coming out in December 2016 regarding on-farm impacts of CSG operations which could help to direct some of this work. The Proponent to contact UQ to discuss the research
- There are undergraduates that have been working on dust measuring device and protocol and they may be doing more in the coming year. They may be able to work with the Proponent. The Proponent to discuss with Member 13.

<u>Outcome</u>: The RRAC approved this project subject to the above comments being met to the GISERA Director's satisfaction.

Following the above discussion, it was resolved that:

<u>Action 5</u>: The Proponent to consider weighing cattle at commencement and end of study.



Action 6: The Proponent to make contact with MLA.

<u>Action 7</u>: The Proponent and GISERA Director to discuss analytical methods and experimental design.

<u>Action 8</u>: The Proponent to consider looking at more than one site and to make clear in the proposal whether the area(s) being used undergoing development or are an operational paddock.

<u>Action 9</u>: The Proponent to consider incorporating a weather station and include in the proposal.

<u>Action 10</u>: The Proponent to make contact with UQ to discuss results from the onfarm impacts of CSG operations study and the possibility of undergraduates assisting on this project.

2D Project Proposal - Air, water and soil impacts of hydraulic fracturing

Key points raised:

- This project comprises a Phase 1 Review and Monitoring/Sampling Design (8 months) and a Phase 2, Monitoring and Sampling Program (13 months). This Project Order concerns the approval of Phase 1 with a stage-gate 'Go/No-Go' decision step to be approved by the QLD RRAC prior to commencement of Phase 2.
- How do you deal with arguments that the site monitored is not necessarily going to be representative of typical hydraulic fracturing methods?
- There will be multiple wells being hydraulically fractured over the period and monitoring is going to be ongoing so we do reduce this issue to some degree. What the additional expert panel for this project needs to be assured of is that there is essentially nothing unusual about a particular well field that we are looking at. That is, the wells are representative.
- The Proponent to look at inviting a production engineer onto the external Review Panel to oversee the representativeness of the sampling.
- The research will address an important gap and would benefit the community and external stakeholders.

<u>Outcome</u>: The RRAC approved this project subject to the above comments being met to the GISERA Director's satisfaction and the external funding component.

Following the above discussion, it was resolved that:

<u>Action 11</u>: The Proponent look to include a Production Engineer on the external Review Panel.

3 Project Variation - Hydrocarbons in Groundwater, Surat and Bowen Basins

Key points raised:



- As part of phase 1, a literature review of dissolved hydrocarbons in groundwater with emphasis on the Australian Surat and Bowen Basins was completed in September 2015. Since then, this project has experienced some difficulties in progressing. In order to progress this project a revised work plan and schedule is proposed.
- Existing milestones will be replaced with those outlined in the meeting papers.
- No additional funds for this project are not being sought.
- The revised project delivery date will be 31 December 2017.

<u>Outcome</u>: The RRAC approved this project variation as detailed in the meeting papers.

4 Other business

4.1 **Project Variation - Ambient Air Quality, Surat Basin Queensland**

Key points raised:

- For project milestone 3.1 (Modelling study report), the air quality model is dependent on an emissions inventory which is being built by Katestone Environmental. There have been significant delays in obtaining emission data from industry partners. It is proposed that the delivery date of this milestone be pushed back until November 2017.
- Project milestone 5.1 (particulate validation study), involves deploying an instrument in the field for 6 months. The instrument to be used has had several major issues and was sent back to the US for repair and is expected to arrive back in Australia late Nov/early Dec 2016. They need to make electrical modification to one of the sites which will take 2-3 weeks. Installation will be completed in February 2017 and then must run for 6 months. It is proposed that the delivery date of this milestone be pushed back until August 2017

<u>Outcome</u>: The RRAC approved a variation to push back milestones 3.1 to 30 November 2017 and 5.1 to 31 August 2017.

Damian Barrett adjourned the meeting at 11.05 am.

Minutes submitted by: Jizelle Khoury

Minutes approved by: **Damian Barrett**