

Actions from GISERA NSW Regional Research Advisory Committee Meeting 26 May 2016

Key

Action Open
Action Due/overdue
Action complete/in train

	Item	Action	Owner	Due	Status
1.	26-05-16 Item 2	Action 1 : Member 15 to prepare a roadmap identifying the strategy, gaps and research priorities.	Member 15	10 June 2016	
2.	26-05-16 Item 2	Action 2 : Member 14 to provide the RRAC with a copy of the GISERA Communication and Engagement Plan for 2016/17	Member 14	August 2016	
3.	26-05-16 Item 2	Action 3 : All proponents to include a section on previous knowledge/work done on the issue, indicate how their proposal adds value to that work and, as appropriate, describe the collaborative partnerships that will be explored and incorporated to enhance research outcomes.	All proponents	10 June 2016	
4.	26-05-16 Item 3	Action 4 : Member 1/Member 15 to talk to Regional Development Authority, NSW Farmers' Association and Local Land Services more broadly and maintain regular communication with the Centre for Balanced Land Use and NSW Chief Scientist and Engineer.	Member 1 / Member 15	Ongoing	



5.	26-05-16 Item 4A	Action 5 : The proponent and Member 3 discuss access to UoA data and determine whether the data can be applied to this work.	Research Proponent & Member 3	7 June 2016	
6.	26-05-16 Item 4A	Action 6 : The proponent to consider surveying emissions from gas related sources in the Camden gas fields, and in other areas.	Research Proponent	10 June 2016	
7.	26-05-16 Item 4A	Action 7 : The RRAC and project proponent to provide a list of groups to be included in interactions as part of the Communications and Engagement Strategy.	All	30 June 2016	
8.	26-05-16 Item 4A	Action 8 : The proponent to include a section on previous knowledge/work done on the issue, indicate how this proposal adds value to that work and describe the collaborative partnerships that will be explored and incorporated to enhance research outcomes.	Research Proponent	10 June 2016	
9.	26-05-16 Item 4B	Action 9 : Member 15 to obtain Member 4's views and input on this proposal.	Member 15	7 June 2016	
10.	26-05-16 Item 4B	Action 10 : The proponent will consult with NIER to understand the work already done and explore collaborative opportunities.	Research Proponent	7 June 2016	
11.	26-05-16 Item 4B	Action 11 : The proponent to include in the introduction a section on previous knowledge/work done on the issue, data already available and the value add of this proposal.	Research Proponent	10 June 2016	
12.	26-05-16 Item 4B	Action 12 : The proponent to add a stage gate after 6 months that defines the milestones to be achieved and then the GISERA Director can provide approval to move to next stage.	Research Proponent	10 June 2016	

13.	26-05-16 Item 4B	Action 13 : Include the GISERA's Communication and Engagement Strategy, the development of a fact sheet on the GAB focusing on the Pilliga, and other planned communication and extension outputs.	GISERA Communications Advisor	September 2016	
14.	26-05-16 Item 4C	Action 14 : Member 13 to advise who NIER survey contact is.	Member 13	6 June 2016	
15.	26-05-16 Item 4C	Action 15 : Research proponent to contact NIER to understand use of word 'wellbeing'.	Research Proponent	7 June 2016	
16.	26-05-16 Item 4C	Action 16 : The proponents look at the language in the proposal and provide clarity were necessary.	Research Proponent	10 June 2016	
17.	26-05-16 Item 4C	Action 17 : The proponent to include in the introduction a section on previous knowledge/work done on the issue and to explore collaborative opportunities.	Research Proponent	10 June 2016	
18.	26-05-16 Item 4D	Action 18 : The proponent to incorporate into proposal the potential for local use of gas by industries.	Research Proponent	10 June 2016	
19.	26-05-16 Item 4D	Action 19 : The proponent to include in the introduction a section on previous knowledge/work done on the issue.	Research Proponent	10 June 2016	
20.	26-05-16 Item 4D	Action 20 : Include the GISERA's Communication and Engagement Strategy, the development of a fact sheet similar to the 'rural decline trend' factsheet produced for Chincilla and other extension outputs.	GISERA Communications Advisor	September 2016	
21.	26-05-16 Item 4E	Action 21 : The proponent to contact Member 3 to understand work that has already been done and explore opportunities for collaboration.	Research Proponent	7 June 2016	

22.	26-05-16 Item 4E	<u>Action 22</u> : The proponent needs rework the proposal to include both agriculture section (Narrabri and Camden gas fields) and Pilliga Forest and must be explicit on value add.	Research Proponent	10 June 2016	
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Minutes
GISERA NSW Regional Research Advisory Committee Meeting No. 1
Thursday, 26 May 2016
Exhibition Room, The Crossing Theatre, 117 Tibbereena Street, Narrabri

OPENING

The meeting of the GISERA NSW Regional Research Advisory Committee was called to order at 8.55 am on Thursday, 26 May 2016 at The Crossing Theatre, Narrabri by Damian Barrett, GISERA Director.

PARTICIPANTS

Damian Barrett: GISERA Director (*CSIRO*)

Michael Braunack: Research Scientist, Agriculture (*CSIRO*)

Neale House: Manager Environment and Water NSW (*Santos*)

James Duggleby: Senior Hydrogeologist, Group Operations (*AGL*) – for Aaron Clifton

Alison Sheridan: Head of School, UNE Business School (*University of New England*)

Jack Warnock: Lower Namoi Cotton Growers' Association and Managing Director (*Warnock Agronomics Pty Limited*)

Ken Flower: General Manager (*North West Local Land Services*)

Deborah Hailstones: Manager Science Strategy (*NSW Department of Primary Industries*) – for Philip Wright

Annette Turner: President (*Country Women's Association of NSW*)

Dan O'Sullivan: Onshore Gas and Sustainability Advisor (*CSIRO*)

Jizelle Khoury: GISERA Executive Officer (*CSIRO*)

Apologies:

Peter Wallbrink: Research Director – Basin Management Outcomes – Land and Water (*CSIRO*)

Jock Laurie: NSW Land and Water Commissioner (NSW Department of Industry)

ITEMS FOR DISCUSSION

1 Welcome, introductions, overview of GISERA and goals for the day

The GISERA Director welcomed all members to the meeting and provided an overview of GISERA and the schedule for the day.

2 Understanding each other's expectations

- The RRAC were interested to understand the strategy for development of tranche 1 projects and how these projects line up with the strategy and represent the highest prioritised topics.

- The RRAC agreed that it would be useful to have a roadmap or research strategy document identifying what the research gaps are and what will be addressed in each tranche (include these first 5 projects)
- The Federal Government have stipulated what portions of their funds are to be spent in each topic area. We need to meet those allocations.
- We also need to consider other stakeholder research priorities for remaining funds
- The accountability on 'how you got there' is very important as is the RRAC's ability to explain the reasoning behind each proposal, ensuring it is meeting a priority.
- The RRAC were interested in understanding how the GISERA Communication and Engagement Plan would complement and align with the outcomes of the research projects.
- The RRAC emphasised the need for all proposals to include a detailed list of all current knowledge and work already done in that space so to avoid duplication of efforts, and for projects to include genuine and open collaboration wherever value can be added.
- The RRAC emphasised the need for all proposals to articulate how research results would be translated to outcomes – integrated, active and passive extension (to industry, farmers, the community, stakeholders within the alliance etc.) throughout each project.

Following the above discussion, it was resolved that:

Action 1: Member 15 to prepare a roadmap identifying the strategy, gaps and research priorities.

Action 2: Member 14 to provide the RRAC with a copy of the GISERA Communication and Engagement Plan for 2016/17.

Action 3: All proponents to include a section on previous knowledge/work done on the issue, indicate how their proposal adds value to that work and, as appropriate, describe the collaborative partnerships that will be explored and incorporated to enhance research outcomes.

3 Summary of stakeholder engagement in NSW to date (provided by Member 15)

- A number of stakeholders in NSW have already been met. They include:
 - Narrabri Region
 - Narrabri Gas Project Community Consultation Committee
 - Narrabri Chamber of Commerce
 - Narrabri local Aboriginal Land Council
 - Namoi Water
 - Narrabri Mayor
 - Local Land Services
 - Santos
 - Macarthur Region

- A team of CSIRO researchers toured the AGL gas facility in Camden followed by discussions with key social, environmental and operational staff.
 - Stakeholders identified by GISERA but not yet met
 - CWA, NSW Government agencies, NSW Cotton Growers, Camden CCC, People of the Plains.
- The RRAC also suggested we talk to Regional Development Authority (Russell Stewart is the current Chair), NSW Farmers' Association, and Local Land Services more broadly and maintain regular communication with the Centre for Balanced Land Use and NSW Chief Scientist and Engineer, Mary O'Kane, in particular.
- List of concerns/potential social & environmental impacts of CSG development in the Narrabri and Macarthur regions are:
 - Agriculture productivity being affected by:
 - Access to water and water quality
 - Gas / farm design imposition
 - Surface footprint of development - including access roads, bushfire risk, habitat clearing, noise, night lighting, dust and traffic
 - Land use conflict - with agriculture, catchments, or high conservation value areas.
 - Community division – focusing on understanding the impacts, but also wellbeing, resilience and the labour market
 - Greenhouse emissions of methane and CO₂ (known as 'fugitive emissions' and seeps)
 - Greenhouse gas profile (CSG and agriculture) and competitiveness with coal
 - Toxins and health
 - Safety psychology
 - Decommissioning and well integrity post P&A
 - Rehabilitation (including offsets)
 - Communication – access to information and interpretation. Meaning for policy and social licence to operate
 - Indigenous relations, engagement process, monitoring, partnerships
 - Groundwater effects - including depletion and potential contamination of surrounding aquifers.
 - Fluctuations in water availability - from depressurization in nearby aquifers
 - Surface water effects - typically resulting from produced water disposal.
 - Hazardous waste - from water treatment or drilling muds.
 - Subsidence - from depressurisation and large-scale extraction of water.
 - Ecological value of the Pilliga
 - Regulatory efficiency
 - Residential development / urbanisation (Macarthur region)
 - Providing context to community – history of industry, technical issues (Macarthur region)

Action 4: Member 1/Member 15 to talk to Regional Development Authority, NSW Farmers' Association and Local Land Services more broadly and maintain regular communication with the Centre for Balanced Land Use and NSW Chief Scientist and Engineer.

4A Project Proposal – Regional Methane Emissions in NSW CSG Basins

Key points raised:

- Santos engaged University of Adelaide to establish a baseline of emissions through the region between 2013-2015. UoA currently own the IP. Need to have a conversation with UoA researchers to determine:
 - the nature of the data
 - if primary data can be made available to CSIRO
 - the data completeness and data quality
 - opportunities for collaboration
- Bryce Kelly (Associate Professor Hydrogeology at The University of New South Wales) has also done some work in this area. CSIRO researchers should ensure there is no duplication.
- We would like to leverage existing data and research to date where possible – both the Santos/UoA, UNSW, EPA.
- Also good to incorporate learnings from EPA work (noting that the final report may not be publicly released).
- The RRAC requested that this study will incorporate the emissions from the coal mines.
- The Pilliga will give different readings than the adjoining Namoi valley. Need to look at the baseline.
- The RRAC requested that the proposal could articulate some extension outputs associated with the project – resources (e.g. videos, brochures), seminars, field walks etc.
- It was requested that our research and communications staff work directly with the agriculture community (e.g. comms groups within peak industry bodies such as Cotton Info people, plus LLS staff, private agronomists etc.) to make sure that information gets out into those networks.
- It was suggested that the Communication and Engagement Strategy include interactions with these particular groups. Will seek RRAC input to name the groups and ensure they are listed.
- Proposal would benefit from applying the mobile detection technology to the Camden gas fields, rather than just using the satellite data in this area. This will allow direct comparison between the data sets collected by the two methods, potentially informing future research.

Outcome: The RRAC were happy for the proposal to be developed further to incorporate the above comments and then final approval of the RRAC would be sought via email.

Following the above discussion, it was resolved that:

Action 5: The proponent and Member 3 discuss access to UoA data and determine whether the data can be applied to this work.

Action 6: The proponent to consider surveying emissions from gas related sources in the Camden gas fields, and in other areas.

Action 7: The RRAC and project proponent to provide a list of groups to be included in interactions as part of the Communications and Engagement Strategy.

Action 8: The proponent to include a section on previous knowledge/work done on the issue, indicate how this proposal adds value to that work and describe the collaborative partnerships that will be explored and incorporated to enhance research outcomes.

4B Project Proposal – Impacts of CSG depressurization on Great Artesian Basin flux: conceptual model refinement, uncertainty analysis and hypothesis

- Prof Bill Collins, Director of the NSW Institute for Frontier Geoscience within the Newcastle Institute for Energy and Resources (NIER) has done research in this area. The CSIRO researchers will need to understand what work has been done first (provide a summary in proposal) and consider what the value add of this GISERA proposal would be.
 - The researchers need to make a clear and explicit in the proposal - what is new, what is the value add and what is the existing data.
 - The RRAC suggested that Member 4's input on this proposal be sought as it is in his area of expertise.
 - The RRAC noted the utility and value of the fact sheet on the GAB provided within the information package and understood the reasons for its focus on the Surat Basin. The RRAC felt that a corresponding factsheet (and infographic if possible) on the GAB, but focusing on the Pilliga would provide an excellent resource for NSW.
 - The research proponent to include a stage gate after first 6 months. If requirements are met and milestone is complete, the GISERA Director can provide approval to proceed with the next stage.
 - The RRAC requested that the proposal articulate some extension outputs associated with the project –resources (e.g. videos, brochures), seminars, field walks etc.

Outcome: The RRAC thought that the proposal had merit, however felt that the researchers needed to i) establish a connection with NIER and ii) fully explain the work already done and the value add in the proposal before final approval from the RRAC was sought.

Following the above discussion, it was resolved that:

Action 9: Member 15 to obtain Member 4's views and input on this proposal.

Action 10: The proponent will consult with NIER to understand the work already done and explore collaborative opportunities.

Action 11: The proponent to include in the introduction a section on previous knowledge/work done on the issue, data already available and the value add of this proposal.

Action 12: The proponent to add a stage gate after 6 months that defines the milestones to be achieved and then the GISERA Director can provide approval to move to next stage.

Action 13: Include the GISERA's Communication and Engagement Strategy, the development of a fact sheet on the GAB focusing on the Pilliga, and other planned communication and extension outputs.

4C Project Proposal – Community wellbeing and CSG in the Narrabri regional of NSW

Key points raised:

- Construction and operation phases seems blurred – the language of the proposal must not assume operations will inevitably occur under the gas development project until is formally approved
- People think gas is already here. The work must properly clarify the situation so we are comparing people's expectation from a common understanding on where things are at.
- Need to ensure it does articulate specifically what the community concerns are as it will feed into the strategic roadmap and result in further work in the future.
- This project demonstrates evidence we are listening to the community.
- NIER also conducted a recent survey on 'wellbeing' about suicide rate in Narrabri which is high compared to other regions. A potential language issue - may distort views.
- The RRAC requested that the proposal articulate some extension outputs associated with the project –resources (e.g. videos, brochures), seminars, field walks etc.

Outcome: 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:

Action 14: Member 13 to advise who NIER survey contact is.

Action 15: Research proponent to contact NIER to understand use of word 'wellbeing'.

Action 16: The proponents look at the language in the proposal and provide clarity were necessary.

Action 17: The proponent to include in the introduction a section on previous knowledge/work done on the issue and to explore collaborative opportunities.

4D Project Proposal – Analysing economic and demographic trajectories in NSW regionals experiencing CSG development

Key points raised:

- It would be good to also look at opportunities for small and medium sized businesses and other industries to develop around gas industry as distinct from the direct benefits of employment.
- A longer term project for tranche 2 could be to also identify alternative uses for the gas locally.
- RAAC and GISERA staff felt that a key issue with community acceptance could be that there is no broader community benefit perceived to come from the industry, and it's possible that community perception and trust would change if they could benefit from broader economic activities.
- The RAAC asked whether once the gas is extracted, there an opportunity to utilise the gas as an energy source to either replace existing energy sources or expand to develop a new industry in the region (such as fertiliser production)?
- In the current project they will use several different scenarios – feedback from the RRAC can be provided on what scenarios are used.
- Could see a future proposal being developed around local industry and potential benefits.
- This community is very wary of markets that export and have little local benefits. Analysis is needed of the local and regional benefits of gas.
- Research is needed on local productivity, jobs, and equity.
- Another tranche 2 project could be around regulatory efficiency
- The RRAC noted the excellent fact sheet on 'rural decline trend' that was produced for Chinchilla, and felt that a corresponding factsheet for the Pilliga and surrounds would be a great resource for NSW.
- The RRAC requested that the proposal articulate some extension outputs associated with the project.

Outcome: 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:

Action 18: The proponent to incorporate into proposal the potential for local use of gas by industries.

Action 19: The proponent to include in the introduction a section on previous knowledge/work done on the issue.

Action 20: Include the GISERA's Communication and Engagement Strategy, the development of a fact sheet similar to the 'rural decline trend' factsheet produced for Chincilla and other extension outputs.

4E Project Proposal – Setting the scene – understanding environment and agriculture and agriculture within the Narrabri region of NSW

Key points raised:

- The RRAC questioned the scale of the ‘local area’ in Narrabri region - is it whole area or a part? Clarification in proposal including a map would be useful.
- During the Santos gas project field tour, we saw land with 3 well pads on open flat land, but most of the region has bushland and will be harder to photograph.
- Santos have already invested money to do high-res imagery of the region and are concerned about putting \$200K into survey work that could be used elsewhere.
- It is important the CSIRO researchers have a conversation with Member 3 to understand what has already been done to ensure there is no duplication and that this work adds value, and to explore collaborative opportunities.
- This area is not like the Surat as it is in bushland with smaller amount of agriculture. If we do the work, need to understand the advantages and the disadvantages.
- Essential to connect with Balanced Land Use, Newcastle University.
- Would add value to the program to develop the project to include data collection and analysis in the Camden region, given the mix of mining, agriculture and communities in the area.
- The research proponent will need to rework this proposal to include two parts – agriculture sector (Narrabri and Camden gas fields) + Pilliga Forest. Turn into a landscape impact study that combines agriculture and ecological values and needs to be clear on the geographical area to be studied and to what resolution, taking advantage of the work already done by Santos. Will also need to include gas bores with agriculture and gas bores with Pilliga Forest – as the interactions are different.
- The RRAC requested that the proposal could articulate some extension outputs associated with the project –resources (e.g. videos, brochures), seminars, field walks etc.

Outcome: The RRAC would like this proposal reworked to address the comments raised and will review new proposal out of session.

Following the above discussion, it was resolved that:

Action 21: The proponent to contact Member 3 to understand work that has already been done and explore opportunities for collaboration.

Action 22: The proponent needs rework the proposal to include both agriculture section (Narrabri and Camden gas fields) and Pilliga Forest and must be explicit on value add.

6 Summarise agreed research priorities and tranche 2 and 3

The RRAC provided the following comments:

Member 5

- Overwhelming feedback is that greatest concern is impact on water.
- Aim is to get information on water out to the community

Member 6

- Emotion and perception are big issues - even people who live outside a potentially impacted area are concerned. Need to change the mindset and be clear on what are the real risks.
- Issue in the community is understanding well integrity

Member 1

- Important that as part of our Communication and Engagement Strategy there is context setting - perceived risks and real risks

Member 8

- Water quality is important, but a lot of federal and state resources are being directed to water - of concern is that with current drought, we are throwing money to put bores down.

Member 5

- As part of our social research need to look at community/political decision making. Similar to Snowy Mountains Scheme - community engagement takes place at same time as construction.

Member 1

- Conveying lessons learnt in the Surat is an important step as part of our Communication and Engagement.

Member 6

- Would like to see benefits of CSG in our immediate area - development of alternate energy source. Opportunity for positive outcome.

Member 5

- You get more benefits if you proactively work in the area when it's being built.
- Would like us to look at how there could be major benefits to the community.

Member 11

- Would like to get balance right between conflict in community - i.e. community's attitude toward CSG + CSG attitude toward community.
- Important to get the balance right between water & agriculture.
- All about communication and getting the right message out there.

Member 13

- Important to ensure we reduce duplication. Looking for new and broader collaborations and opportunities to add other partners. Cross jurisdictions idea

good. Looking for commonalities from overseas R&D that can be picked up quickly.

- Social research to identify who can fulfil the role of the trusted, independent, 'honest' messenger in these contexts. Is peer-to-peer the best option?

Member 9

- There is a gap and opportunity to look at social dimension on water. How can we build people's trust? Openness to the messages that we can learn more about.

Member 8

- Communication is important – info-graphics is the way to go get people to understand.

Member 12

- Communications is important – good to have a third voice that can provide an independent position.
- Residential encroachment in Camden an issue – resulting in social problems.

Member 3

- Interested in social aspects and the messaging around social aspects.

NEXT MEETING

The next meeting of the NSW Regional Research Advisory Committee is yet to be scheduled. It is anticipated that a meeting will occur once further proposals are established.

MEETING CLOSURE

The GISERA Director closed the meeting at 4.00 pm

Minutes submitted by: **GISERA Secretariat**

Minutes approved by: **GISERA Director**