

Project Order

Proforma 2015

1. Short Project Title (less than 15 words)

Community functioning and wellbeing survey 2

Long Project Title A longitudinal study of impacts of CSG extraction on community functioning and wellbeing in the Western Downs: Study 2 2016

GISERA Project Number S6

Proposed Start Date 1 October 2015

Proposed End Date 30 September 2016

Project Leader Rosemary Leonard

2. GISERA Research Program

- | | | |
|--|--|--|
| <input type="checkbox"/> Biodiversity Research | <input type="checkbox"/> Marine Research | <input type="checkbox"/> Land Research |
| <input type="checkbox"/> Water Research | <input checked="" type="checkbox"/> Social & Economic Research | <input type="checkbox"/> GHG Research |

3. Research Leader, Title and Organisation

Rosemary Leonard
Principal Research Scientist
Land & Water CSIRO
commitment .1 FTE

4. Summary

In February 2014, near the end of the construction phase and before transitioning to the operations phase, a telephone survey was conducted across the Western Downs as part of the community functioning and wellbeing project. The results identified key contributors to community wellbeing, community resilience and adaptation, acceptance of coal seam gas, and

perceptions of future wellbeing. It provided a strong foundation for a longitudinal study of the changes in communities across different phases of CSG development. Community feedback indicated that the results were useful for future planning and important for understanding their current situation. However, rapid change was continuing as the community moved into the operations phase of the industry and therefore they called for repeat surveys to understand and manage these changes.

In response to community feedback we aim to conduct Survey 2 in February 2016 to:

- Measure community wellbeing and adaptive processes at a second point in the industry cycle (the early stages of the operations and maintenance phase)
- Identify differences in perceptions resulting from the move from the construction phase (Survey 1) to the operations and maintenance phase.
- Obtain community and other stakeholder feedback on the interpretation and implications of the findings and identify opportunities for collaborative responses that could improve community wellbeing and adaptation for the future.

CSIRO regards this project as high priority and as such has increased the CSIRO contribution to 53%.

Extension option: Third survey 2017

In 2015 rapid change continues in the Western Downs, for example there are now many unoccupied homes in Chinchilla and house values and rents are declining, thus attracting many low income renters to the area. By 2017 we expect much of the instability will have passed and the towns can assess their new situation. Hence we propose a third survey in February 2017 to examine community wellbeing over a longer time period (i.e. Survey 1 = the end of the construction phase, Survey 2 = the end of the transition phase, and Survey 3 = the operational phase).

5. Budget Summary

Expenditure	2011/12 Year 1	2012/13 Year 2	2013/14 Year 3	2014/15 Year 4	2015/16 Year 5	2016/17 Year 6	2017/18 Year 7	Total
Labour					88,916	42,209		131,125
Operating					41,854	7,500		49,354
Total Costs					130,770	49,709		180,479
CSIRO								
Total Expenditure								

Expenditure per Task	2011/12 Year 1	2012/13 Year 2	2013/14 Year 3	2014/15 Year 4	2015/16 Year 5	2016/17 Year 6	2017/18 Year 7	Total

Task 1					130,770	49,709		180,479
Task 2								
Task 3								
Task 4								
Task 5								
Total Expenditure					130,770	49,709		180,479

Cash Funds to Project	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Partners	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
CSIRO					60,000	25,000		85,000
Sub Total					60,000	25,000		85,000
Total Cash to Partners					60,000	25,000		85,000

Source of Cash	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Contributions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
GISERA					60,000	25,000		85,000
Total Cash Contributions					60,000	25,000		85,000

In-Kind Contribution from Partners	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
CSIRO					70,770	24,709		95,479
Total In-Kind Contribution from Partners					65,386	24,854		90,240

	Total funding over all years	Percentage of Total Budget
GISERA Investment	85,000	47%
CSIRO Investment	95,479	53%
Total Other Investment		
TOTAL	180,479	100%

Task	Milestone Number	Milestone Description	Funded by	Participant Recipient	Start Date (mm-yy)	Delivery Date (mm-yy)	Fiscal Year	Fiscal Quarter	Payment \$
Task 1	1.1	Conduct wellbeing survey after discussion with key stakeholders	GISERA	CSIRO	Oct 15	Feb 16	15/16	3rd	35,000
Task 2	2.1	Report on survey findings	GISERA	CSIRO	Mar 16	Jun 16	15/16	4th	27,620
Task 3	3.1	Dissemination, implications and opportunities for future collaborative action	GISERA	CSIRO	July 16	Sept 16	16/17	1st	27,619

6. Other Researchers (include organisations)

Researcher	Time Commitment (project as a whole)	Principle area of expertise	Years of experience	Organisation
Rosemary Leonard	0.1 FTE	Social capital, social psychology & mixed method research	>20	CSIRO
Rod McCrea	0.2 FTE	Subjective wellbeing & quantitative methods	7	CSIRO
Andrea Walton	0.2 FTE	Social psychology & rural studies	>5	CSIRO

7. GISERA Objectives Addressed

Carrying out of research and improving and extending knowledge of social and environmental impacts and opportunities of CSG-LNG projects for the benefit of the CSG-LNG industry, the relevant community and the broader public.

Informing government, regulators and policy-makers on key issues regarding policy and legislative framework for the CSG-LNG industry.

8. Program Outcomes Achieved

Details are provided in *Section 13. Project Objectives and Outputs*

9. Program Outputs Achieved

Details are provided in *Section 13. Project Objectives and Outputs*

10. What is the knowledge gap that these research outputs will address?

The project is a response to community, industry, and other stakeholder requests for a longitudinal study of the effects of the CSG industry on community wellbeing. CSG development is new to Australia and while lessons have been learned from international studies, generalisations from international studies need to be refined for an Australian context, especially as most have related to shale gas in the U.S. The best ways to maintain, and potentially grow, community wellbeing and adaptive processes through the various development phases of the CSG industry are still unclear. The proposed project will build on the findings of Survey 1 completed towards the end of the construction phase and make comparisons with wellbeing in the operations and maintenance phase.

There is still conjecture about how community wellbeing is changing overtime in the Western Downs, and from a regional and broader national perspective, it is important to monitor community wellbeing and acceptance of CSG activities in the Western Downs to contribute to an informed wider public debate about CSG extraction. The main purpose of survey 2 is to monitor community wellbeing and functioning over time with representative

samples of residents in the Western Downs using reliable and valid measures established in survey 1.

We recognise the need for comparisons across regions and to this end items will be added to enable comparisons from this survey with the University of Canberra's Australia wide survey of regional wellbeing. However, the measures of community wellbeing and resilience in this survey are far more detailed. Further, in the past individual CSG companies have conducted their own surveys of community perceptions, but they have ceased to do so and these past results are not publicly available, and so there is a need for publicly available, independent, and representative survey data on community wellbeing in the Western Downs.

1.1. How will these Research outputs and outcomes be used in State Government

They will help to inform government, regulators, policy-makers, and the communities themselves on key issues regarding the functioning and wellbeing of communities affected by the CSG-LNG industry. This will assist organisations like the Western Downs Regional Council; the Queensland Gasfields Commission, and the Coordinator General to identify priority areas of unmet and emerging community needs. In particular it will identify strategies that can be enacted by local and state government to proactively reduce stresses associated with rapid change and also to take advantage of opportunities arising from resource development.

1.2. Project Development

The project is a response to community, industry, and other stakeholder requests for a longitudinal study of the effects of the CSG industry on community wellbeing and adaptive responses to change. This project builds on three years of research on aspects of community wellbeing and consultation with the communities CSG companies and other stakeholders by the research team which has involved both qualitative and quantitative studies (see papers listed below).

For many people living in communities potentially impacted by onshore gas their feelings and attitudes towards the industry are 'luke-warm'. While environmental management and employment and business opportunities are both important to acceptance by the local community, other issues are equally important. These include levels of trust in government and industry stakeholders, having a role in decision-making, and community perceptions of how well they are responding to the changes. Key to this is reducing uncertainties relating to the industry. Three main groups of activities emerged as important for reducing uncertainty and improving community acceptance. These included access to and use of information; adequate governance including policy, planning, and monitoring; and community engagement and collaboration such that community partakes as an active stakeholder.

Another round of change and uncertainty to affected communities has arrived with the end of the construction phase, and the beginning of the operations phase. This change is associated with a marked reduction in activity reduced demand for housing, less visibility of CSG workers and vehicles, decline in demand for local businesses, and quieter towns and highways. It is very unclear how the community, or rather different segments of the community are responding to these changes. Hence there has been a demand by multiple community groups for a repeat of the 2014 community wellbeing survey.

The development of the revised survey for 2016 will draw on community industry and government responses to all the previous social research that have been conducted by GISERA. In 2014 a community forum presented three completed projects so participants could

see the total picture. Feedback from that forum is informing Survey 2. This study links to the current Economic Assessment and Forecasting study by providing valuable quantitative data on wellbeing and responding to change over two different time periods, which could be used to inform the economic modeling of future impacts. The link can also work in reverse, whereby the findings from the Economic Assessment and Forecasting study can help inform interpretation of findings and identification of future opportunities for collaborative solutions. In combination, the two projects will show how regional and community level economic factors interrelate with wellbeing and responding to change. In addition, the second community wellbeing and responding to change survey will investigate landholder perceptions and issues during the operations and maintenance phase and show changes from the previous 2014 survey. This information is useful for the proposed agricultural land management project, 'Telling the Story', which focuses on demonstrating change in the agricultural sector and on gas-farm enterprises specifically.

Publications to date by the research team

- McCrea, R., Walton, A., & Leonard, R. (2014). *A conceptual framework for investigating community wellbeing and resilience*. *Rural Society*, 23(3), 269-281.
- Walton, A., McCrea, R., & Leonard, R. (2014). *CSIRO survey of community wellbeing and responding to change: Western Downs region in Queensland*. *CSIRO Technical report: CSIRO Australia*.
- Walton, A., McCrea, R., Leonard, R., & Williams, R. (2013). *Resilience in a changing community landscape of coal seam gas: Chinchilla in southern Queensland*. *Journal of Economic and Social Policy: Special Edition: The Economic and Social Policy Implications of Coal Seam Gas Mining (CSG) in Australia*, 15(3), 1-23.
- McCrea, R., Leonard, R., & Walton, A. (2015 online) *Community wellbeing and resilience in the context of coal seam gas development*. *Social Indicators Research*. doi: DOI 10.1007/s11205-015-1099-y
- Leonard, R., McCrea, R., & Walton, A. (2015 under review) *Perceived community responses to the coal seam gas industry: The importance of social-relational factors and agency*. *Journal of Rural Studies*
- Walton, A., Leonard, R., McCrea, R., & Williams, R. (2015). *Community Perceptions of on-shore gas development: Challenges and opportunities*. *CSIRO Technical Report, CSIRO Land & Water Canberra*
- Williams, R. and Walton, A. (2015). *Community aspirations and CSG: a visual perspective*. *GISERA Technical Reports. Canberra: CSIRO*.
- Williams, R., & Walton, A. (2014). *Community Expectations and Coal Seam Gas Development*. *GISERA Technical Reports. Canberra: CSIRO*.
- Williams, R., & Walton, A. (2013). *Social licence to operate and coal seam gas development*, a literature review, *GISERA Technical Reports. Canberra: CSIRO*.

13. Project Objectives and Outputs

Survey 2 of community functioning and wellbeing in the Western Downs will:-

- Examine and measure the changes since the end of the construction and beginning of the operations phases through comparisons with Survey 1 in 2014.
- Identify current perceptions of community functioning and wellbeing in 4 local areas (Dalby, Chinchilla, Tara and Miles), as well as for the Western Downs region as a whole.
- Identify issues of specific concern to landholders
- Assess community adaptive resilience in the face of this new round of uncertainty,
- Measure expectations of future wellbeing

- Identify the drivers of community wellbeing and adaptation during the operations and maintenance phase
- Identify strategies and opportunities for collaborative responses for improved community wellbeing.

The outputs will be:

- A report suitable for community, industry, government and other stakeholders to engage in strategic planning which can potentially benefit community wellbeing in this region and other regions involved in future CSG development.
- A journal article
- A pithy and easy to read communiqué highlighting key survey findings and opportunities for collaborative action

14. Project Plan

14.1 Project Schedule

ID	Task Title	Task Leader	Scheduled Start	Scheduled Finish	Predecessor
1	Conduct wellbeing survey 2 after discussion with key stakeholders	Rod McCrea	Oct 2015	Feb 2016	Previous project
2	Report on survey findings	Rosemary Leonard	Mar 2016	Jun 2016	Task 1
3	Dissemination, implications and opportunities for future collaborative action	Andrea Walton	Jul 2016	Sept 2016	Task 2

TASK 1

TASK NAME: Conduct wellbeing survey 2 after discussion with key stakeholders

TASK LEADER: Rod McCrea

OVERALL TIMEFRAME: Oct 15 – Feb 16

BACKGROUND: The survey conducted in Feb 2014 will need to be revised to ensure that it captures recent changes. This will involve discussions with stakeholders including QLD and local government, CSG companies (subject matter experts), and key community and landholder groups. New open-ended questions will be added to the survey about the ongoing interactions between community (including landholders) and CSG companies and how any problems might be addressed in the future.

TASK OBJECTIVE: To prepare a revised wellbeing telephone survey to be conducted in Feb 16

TASK OUTPUTS: Survey 2 data set

SPECIFIC DELIVERABLES: Survey 2 data set

TASK 2

TASK NAME: Report on survey findings

TASK LEADER: Rosemary Leonard

OVERALL TIMEFRAME: Mar 16- Jun 16

BACKGROUND: Survey 2 needs to be analysed both in terms of current wellbeing and adaptation and in comparison with the 2014 survey. Results need to be presented in ways that are relevant to and easily understood by community and other stakeholders. **TASK OBJECTIVE:** To understand and measure the changes in community wellbeing and community adaptation from the construction phase to the operations phase

TASK OUTPUTS: A technical report

SPECIFIC DELIVERABLES: A technical report

TASK 3

TASK NAME: Dissemination, implications, and opportunities for future collaborative action

TASK LEADER: Andrea Walton

OVERALL TIMEFRAME: Jul 16 - Sept 16

BACKGROUND: It is necessary to discuss the Survey 2 findings directly with the community, CSG companies (subject matter experts) QLD and local government and other stakeholders to identify opportunities for future collaboration and to encourage the uptake of the results in their future plans. Meetings and a workshop will be organised by the researchers plus advantage will be taken of other opportunities for discussion of the findings, such as Gisera forums, government forums, university seminars etc. Feedback on Survey 2 will be provided with context from the findings of all other GISERA social and economic projects so the full picture is presented.

TASK OBJECTIVE: For stakeholders to understand the implications of the results for their own policies and plans and identify potential collaborative strategies to effect future change.

TASK OUTPUTS: Meetings with community, QLD and local government, CSG companies, and other stakeholders to discuss the findings from the Survey in the context of other GISERA social and economic projects and implications for future action, plus a multi-stakeholder workshop to identify opportunities for future collaborative action.

SPECIFIC DELIVERABLES: A journal article submitted to e-publish. A communiqué highlighting key survey findings and opportunities for future collaborative action between QLD and local government, communities, and CSG companies.

15. Budget Justification

The budget covers the researchers, Dr Rosemary Leonard (.1 CSOF7) and Dr Rod McCrea (.2 CSOF5), Dr Andrea Walton (.2 CSOF5). These three researchers conducted the first community wellbeing and responding to change survey. The initial project involved both qualitative and quantitative components which gave the researchers a strong understanding of the communities. The initial project produced a report and 4 journal articles (3 published and 1 under review). Dr Walton has been involved in two other GISERA projects in the area and thus developed considerable local knowledge and credibility.

The operating funds will be needed mainly to cover the cost of the telephone survey plus two field trips to the region and hosting the community feedback session.

16. Project Governance

Project management tasks and dissemination activities are specified in item 14.

17. Communications Plan

General communication will be managed by GISERA. Specific feedback of findings will be provided in a community workshop.

18. Risks

Because this is a repeat of the method used in the telephone survey of 2014 (which involved the services of a third party market research company to interview respondents) without problems and the researchers are now familiar with the community, the level of risk for this stage is low.

Capacity to deliver: All the researchers independently have the ability to conduct the research. We are part of a substantial group of social scientists from which replacements could be found if necessary.

19. Intellectual Property and Confidentiality