Australia's National
Science Agency

GISERA | Gas Industry Social and Environmental Research Alliance

Project Order

Short Project Title

CWB4: Trends in community wellbeing and attitudes to CSG development – Comparisons across industry phases from 2014 to 2024

Long Project Title	Trends in community wellbeing and attitudes to CSG development in south-west Queensland: Comparisons across industry phases – from the construction phase (2014), post-construction phase (2016), and early operational phase (2018) to a fully operational phase (2024)
GISERA Project Number	S.18
Start Date	01/03/2023
End Date	31/03/2025
Project Leader	Dr Rod McCrea / Dr Andrea Walton

GISERA State/Territory

- [x] Queensland
- [ ] New South Wales
- [ ] Northern Territory
- [ ] South Australia
- [ ] Western Australia
- [ ] Victoria
- [ ] National scale project

Basin(s)

- [ ] Adavale
- [ ] Amadeus
- [ ] Beetaloo
- [ ] Canning
- [ ] Western Australia
- [ ] Carnarvon
- [ ] Clarence-Morton
- [ ] Cooper
- [ ] Eromanga
- [ ] Galilee
- [ ] Gippsland
- [ ] Gloucester
- [ ] Gunnedah
- [ ] Maryborough
- [ ] McArthur
- [ ] North Bowen
- [ ] Otway
- [ ] Perth
- [ ] South Nicholson
- [x] Surat
- [ ] Other (please specify)

GISERA Research Program

- [ ] Water Research
- [ ] Health Research
- [ ] Biodiversity Research
- [x] Social & Economic Research
- [ ] Greenhouse Gas Research
- [ ] Agricultural Land Management Research
- [ ] Other (please specify)

1. Project Summary

This project proposes to continue monitoring community wellbeing and attitudes to coal seam gas (CSG) development in the Western Downs and eastern Maranoa regions in 2024, now that the CSG industry is in a fully operational phase. In previous community wellbeing surveys, CSIRO monitored community wellbeing in the construction phase (2014), post-construction phase (2016), and early operational phase (2018). This current research proposal will add to a wholistic picture of the impacts of CSG development over time and changes in attitudes toward CSG development. Using the data from earlier surveys, combined with the proposed 2024 data set, will allow longitudinal comparisons and assessments rarely obtained during the life of large industrial projects such as CSG development in the Surat Basin.

This project also involves adding an extra research activity: an innovative narrative study comparing how themes around community wellbeing (e.g., services and facilities and community cohesion) and residents perceptions around CSG development (e.g., perceived impacts and benefits) have been discussed over the past decade, both within and outside of the region. This component involves collecting online media data (e.g., using web-scraping software or downloading stories from newspapers, regional newsletters, forums, and websites) and using an artificial intelligence software called Leximancer to identify the main concepts of conversation around the Queensland CSG industry over the course of its development to the present. This research identifies what is being discussed, how it is being discussed, and how this has changed over a ten-year period. This component will also inform the development of new survey items for inclusion in the 2024 community wellbeing survey that are relevant to understanding future expectations and social acceptability of CSG extraction in the Surat Basin.

2. Project description

Introduction

CSG gas development in the Surat Basin is now in a fully operational phase. Past GISERA research shows indirect employment associated with the gas industry in Queensland peaking in 2024[1]. Thus, this is an important point in time to compare community wellbeing and attitudes to CSG development with those in previous phases of CSG development in the Surat Basin (i.e., 2024 and the previous decade).

Figure 1 shows previous community wellbeing surveys and associated CSG industry phases. Social baseline measures were established in 2014 during rapid economic development in the construction phase. Community wellbeing and attitudes to CSG development were monitored again in 2016 during a local economic slowdown in the post-construction phase, and again in 2018 when communities in the region were adapting to the early operations phase. This project proposes to measure community

[1] https://gisera.csiro.au/research/social-and-economic-impacts-and-opportunities/economic-assessment-and-forecasting/

wellbeing and attitudes again in 2024 when the CSG industry is fully operational in the region, as well as assessing the social changes over the previous decade.

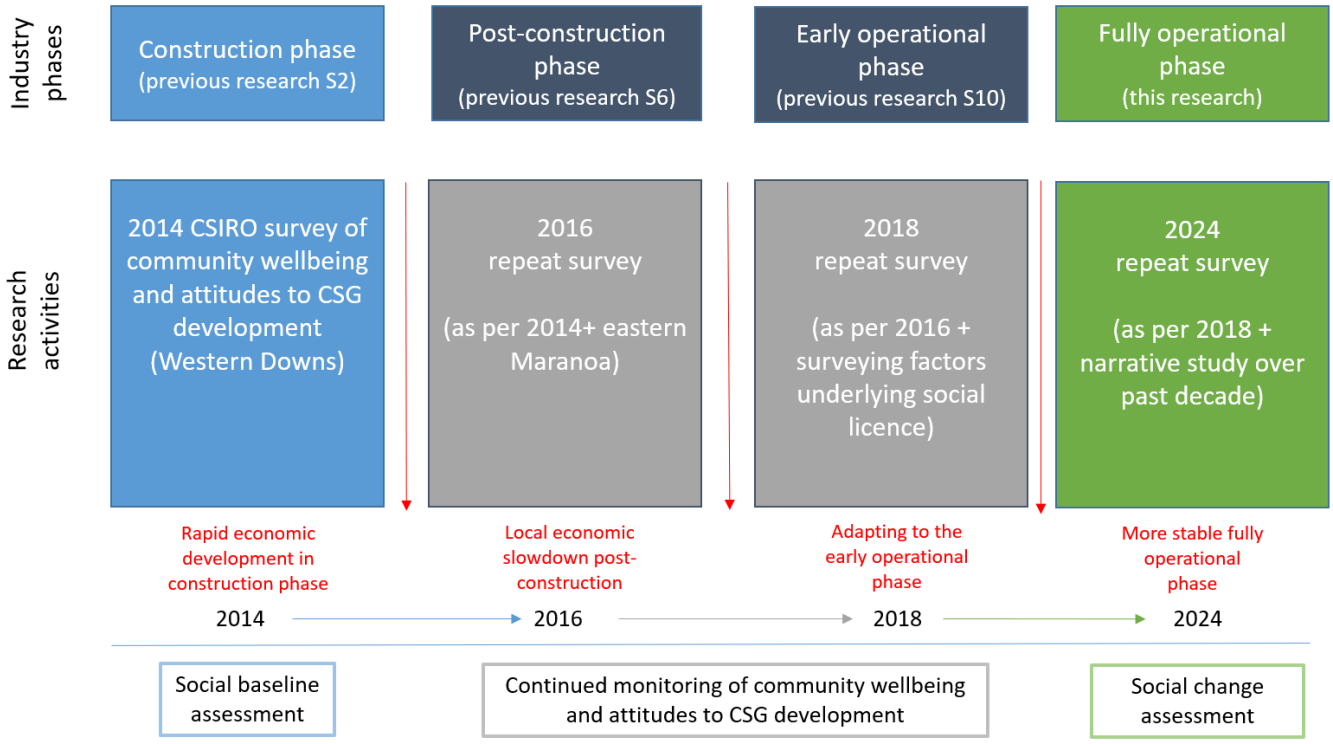

Figure 1 CSIRO community wellbeing surveys and associated CSG industry phases in the Western Downs and Eastern Maranoa regions of Queensland

This figure also shows how the survey has evolved over time from initially surveying community wellbeing and attitudes to CSG in the Western Downs in 2014; adding the eastern Maranoa in 2016; adding seven factors underlying the social acceptability of CSG development in 2018; and adding a narrative analysis about how CSG topics or 'themes' been discussed and how that has evolved over the past decade in this research.

Prior Research

Similar surveys were conducted in 2014, 2016, and 2018 for the Western Downs region, with the eastern Maranoa first being added as a comparison region in 2016. In 2014 the industry was amidst its construction phase, building major infrastructure necessary for operating the industry such as pipelines for gathering and transporting the gas, power lines, compressor stations, water treatment facilities, and gas processing facilities. This infrastructure was scattered through the Western Downs and Maranoa regions and required an extensive labour force to construct. It provided major economic activity to the regions. In 2016, the industry was in its post-construction phase with most major infrastructure completed and the region experiencing an economic slowdown. In 2018, the industry was in a more stable early operations phase with over 1,000 production gas wells operating in the Surat Basin (see Figure 2) and new gas fields opening up in the region. This project involves a fourth

survey of community wellbeing and attitudes to CSG development in the Western Downs and eastern Maranoa regions in 2024, with the industry being in a fully operational phase. It is projected that there will be approximately 10,000 production wells in operation in the Surat Basin at this time[2]. As such, the project will be a capstone for a decade of research and learnings around community wellbeing and attitudes to CSG in the region.

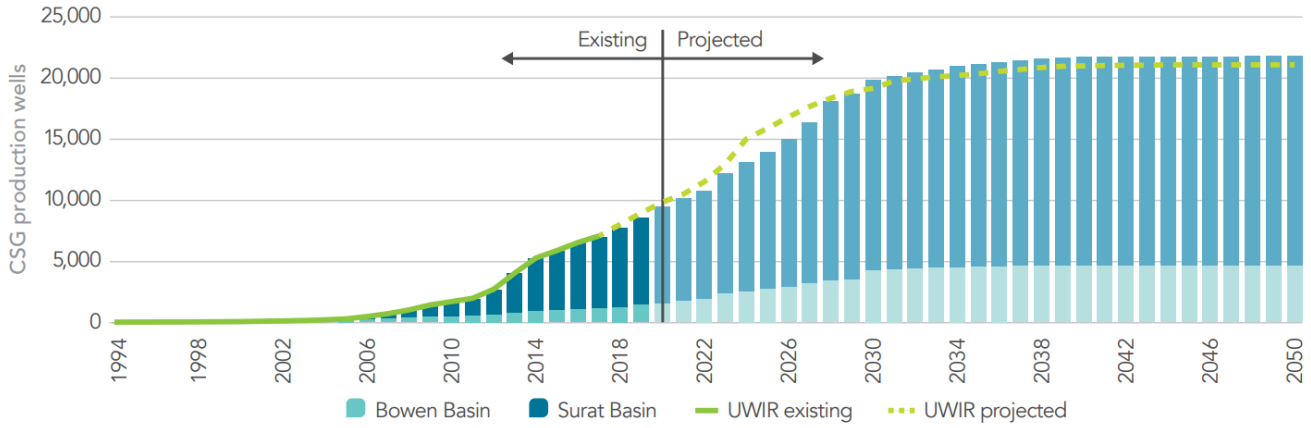

Figure 2 Existing and projected CSG wells to 2050 [2].

The 2018 survey report[3], which compared 2014, 2016, and 2018 findings, found that the Western Downs region had maintained robust levels of overall wellbeing within their communities over the four-year period with ten of the fifteen wellbeing dimensions remaining fairly constant while the other five wellbeing dimensions showed statistically significant changes. In 2018, these reported changes included the following:

- Perceived *environmental quality*, *environmental management*, and *roads* showed gradual but ongoing improvement from 2014
- Perceived *local decision-making processes* showed a gradual negative change over the four-year period
- Perceived *employment and business opportunities* showed the greatest change demonstrating a large drop from 2014 to 2016 in the post-construction phase, with some improvement in 2018 in the early operations phase.

The 2018 results also showed that place attachment had remained high during all industry phases and that the *social fabric* of community life (community cohesion, trust, and social interaction) along with the level of *services and facilities* were consistently the most important drivers of a sense of community wellbeing over time. However, perceptions of community wellbeing were consistently lower for people who live out of town than those who live in town. Expectations about the future

[2] GasFields Commission Queensland, Industry Snapshot, April 2021

[3] Trends in community attitudes to CSG development – Survey 3 – GISERA (csiro.au)

wellbeing of the community improved in 2018 from 2016 and were linked to perceptions of community resilience to CSG development.

Despite a high sense of community wellbeing in the region, people were more modest in their perceptions of how their communities were coping and adapting to CSG development. Smaller town centres in the Western Downs tended to perceive their communities as coping and adapting to CSG development less well than residents from larger towns, and this had remained fairly static over the four-year period. The key factors underpinning people's judgments of how well they felt their communities were responding to change from gas development included: perceptions of *the local economic factors* and *environmental management*, if they believed there was *proactive planning* and *sharing of information*, that they were being *kept informed* and *could have a say*, and if they believed the *community could work together* with government and industry to address challenges and opportunities.

In contrast, levels of perceived community resilience and adapting were significantly higher and positive on average in the eastern Maranoa region. This region also rated both local and societal benefits from CSG development more favourably than the Western Downs. This difference may relate to a longer history of co-existing with conventional and unconventional gas development in the eastern Maranoa combined with less intensive cropping activity undertaken within the region.

These examples of findings from the 2018 survey show the potential value in identifying and understanding differences in 2024 and how things have changed over the past decade. Understanding what the underpinning factors are for maintaining a sense of wellbeing and a strong sense of community resilience is valuable knowledge for directing future resources for helping communities respond to this and other major changes within their regions.

Relevant State/Territory Government independent reviews

The Australian Government's Office of the Chief Economist's 2015 *Review of the socioeconomic impacts of coal seam gas in Queensland*[4] heavily cited GISERA's 2014 community wellbeing survey report[5]. It called for ongoing monitoring of local communities and the CSG industry throughout this report and concluded its Executive Summary with "…ongoing research into the socioeconomic impacts of CSG will continue to help improve the understanding of this relatively new industry" (p2).

In addition, when the most recent project results for *Trends in community wellbeing and local attitudes to coal seam gas development 2014-2016-2018* were presented at various forums, such as the knowledge transfer session, local government presentations, and to community stakeholders, attendees usually expressed their interest for another survey to be conducted into the future. This longitudinal knowledge of how community wellbeing has changed during the time of gas development and how people's perceptions of the industry and gas-related activities have evolved

[4] https://www.industry.gov.au/data-and-publications/review-of-the-socioeconomic-impacts-of-coal-seam-gas-in-queensland

[5] https://gisera.csiro.au/research/social-and-economic-impacts-and-opportunities/community-functioning-and-wellbeing/

are also of use to those Australian states and territories that are considering exploration and development of conventional gas within their own jurisdictions – such as Victoria, and South Australia, and unconventional gas in New south Wales and the Northern Territory.

Need & Scope

Importance and necessity

The CSIRO surveys of community wellbeing and attitudes to CSG development remain the only representative surveys of perceived community wellbeing and attitudes to CSG development conducted in the Western Downs and eastern Maranoa regions. This is important as it provides valuable evidence for understanding what is important to communities for maintaining their community wellbeing when experiencing considerable disruption from a ~$60 billion new industry and the associated large scale infrastructure development. Moreover, CSIRO surveys provide empirical measurement of a community's expectations and perceptions of unconventional gas development within their region.

It is also important to understand the community wellbeing perceptions and attitudes towards CSG development during a fully operational phase of development so that any persistent or emergent issues and problems can be addressed and mitigated. This is reflected in Objective 1.

The scientific value of this project is the unique insights that this project will provide in drawing from 10 years of longitudinal data, using the same survey instrument and data collection approach, to identify and explain the social impacts and opportunities that are associated with large-scale unconventional gas extraction. This value is reflected in the stated Objective 1.

This project builds on existing understandings of how the activities of different industry phases affect community wellbeing and the resilient responses undertaken by a community when faced with large-scale development, such as the gasfields in the Western Downs and eastern Maranoa. The previous community wellbeing projects have provided opportunity to document and test how community wellbeing is affected and how residents perceive gas development and the associated impacts and opportunities. Eight academic papers have drawn from the previous community wellbeing projects and this project will further extend the science developed in these earlier studies[6].

[6] 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,* 15 (3), article 2: 24

McCrea, R., Walton, A., & Leonard, R. (2014). A conceptual framework for investigating community wellbeing and resilience. *Rural Society,* 23(3).

McCrea, R., Walton, A., & Leonard, R. (2016). Developing a Model of Community Wellbeing and Resilience in Response to Change. *Social Indicators Research,* 129(1), 195-214.

Leonard, R., McCrea, R., & Walton, A. (2016). Perceptions of community responses to the unconventional gas industry: The importance of community agency. *Journal of Rural Studies,* 48, 11-21.

Important lessons learned can also be gained from comparing data over the life of the project and communicated to key stakeholders. These lessons can inform community engagement and communication activities for companies undertaking large scale onshore gas development; regional planning and industry best practice guidelines; and allocation of scarce resources for maintaining important drivers underpinning community wellbeing within local communities. Communications of these key messages and lessons learned are reflected in Objective 2.

The narrative study is important for understanding how the region's future is being discussed in local, regional and state media and how this has changed over time. The topic of groundwater may be being discussed differently today than it was in 2014. This can be used to help understand how understandings about CSG development have evolved over time, facilitate present day discussions with key stakeholders, and potentially stimulating forward thinking and planning for the region's future opportunities. This relates to Objective 1.

Objectives

The main research objectives are two-fold:

1. To assess community wellbeing and attitudes towards CSG development in the fully operational phase of large-scale coal seam gas development, and thereby extend our knowledge of how social impacts and opportunities from unconventional gas projects change over four different phases of coal seam gas development – construction, post-construction, early operational, and fully operational phases.

2. To effectively communicate key messages from this latest research study and identify the lessons learned from comparing data over time and within the context of different industry cycles of development.

Walton, A., Williams, R., & Leonard, R. (2017). Community perspectives of coal seam gas development during two phases of industry activity: construction and post-construction. *Rural Society*, 26(1), 85-101.

McCrea, R., Walton, A., & Leonard, R. (2019). Rural communities and unconventional gas development: What's important for maintaining subjective community wellbeing and resilience over time? *Journal of Rural Studies*.

McCrea, R., Walton, A., & Jeanneret, M. T. (2020). An opportunity to say no: Comparing local community attitudes toward onshore unconventional gas development in pre-approval and operational phases. *Resources Policy,* 69, 101824

Walton, A., & McCrea, R. (2020). Understanding social licence to operate for onshore gas development: How the underlying drivers fit together. *Applied Energy,* 279, 115750.

Methodology

CWB Survey study

The study will use the same methodological approach as for the previous CSIRO community wellbeing surveys in Queensland. As in earlier surveys, data will be collected using Computer Assisted Telephone Interviewing (CATI) and the survey instrument updated with minor modifications. The data will be collected at a similar time of the year (Feb to March) to minimise any seasonal differences from previous surveys and use a similar sampling frame to that in 2018. The 2018 sample included more participants with CSG wells on their properties and more residents from the eastern Maranoa region than in both the 2014 and 2016 samples. The aim will be to achieve a representative sample, based on ABS 2021 census data for age, gender, and geographic location, with any deviations being managed through weighting the data prior to analyses. Specifics of the sampling frame and survey instrument are detailed below.

Sampling frame

Essentially, a random sample of 600 residents (400 in the Western Downs Shire and 200 in the eastern Maranoa Shire) will be contacted by telephone (using landline and mobile numbers) to participate in a 35-minute survey on community wellbeing and attitudes to CSG development. Even though this is a long survey with approximately 180 questions, the response rate in last Queensland survey was pleasing at 45%.

The sample is being designed to include at least 100 participants with CSG wells on their properties. As in 2018, properties with CSG wells will be identified using state government data and GIS technology, and their corresponding addresses matched with another database of phone numbers, to maximise farmers with CSG wells in the 2024 sample. This is important for identifying particular social licence issues for this segment of the population and for comparing their responses with farmers who do not have active CSG leases on their properties.

Survey instrument

This and the previous CSIRO surveys of community wellbeing and attitudes to CSG were developed based on a literature review of previous research in the fields of community wellbeing, community resilience and adaptation, and social licence to operate. This literature has been summarised and discussed in papers from past community wellbeing projects[7,8,9]

[7] McCrea, R., Walton, A., & Leonard, R. (2014). A conceptual framework for investigating community wellbeing and resilience. *Rural Society,* 23(3).

[8] 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,* 15 (3), article 2: 24

[9] Walton, A., & McCrea, R. (2020). Understanding social licence to operate for onshore gas development: How the underlying drivers fit together. *Applied Energy,* 279, 115750.

The 2024 community wellbeing survey will be essentially the same as previous surveys for comparability reasons, noting that the 2018 survey was significantly expanded to include a range of factors underling drivers of social acceptance. These additional items have been validated and found to be reliable measures.

The measures of community wellbeing and attitudes to CSG development, and measures of their underlying drivers, each contain a number of questions. The community wellbeing measures have 15 underlying dimensions, each with their own set of questions:

1. Personal safety
2. Community spirit
3. Community cohesion
4. Local trust
5. Community participation
6. Social interaction
7. Environmental quality
8. Environmental management
9. Local decision making and citizen voice
10. Services and facilities
11. Town appearance
12. Roads
13. Income sufficiency
14. Employment and business opportunities
15. Health

There are also measures relating to community resilience, coping, and adapting.

The measures of attitudes and perceptions of CSG also include underlying drivers of social licence to operate:

1. Perceived impacts and risks
2. Perceived benefits – local and societal
3. Perceived fairness – procedural and distributional
4. Trust – in government and CSG companies
5. Quality of relationships and responsiveness of CSG companies
6. Governance – formal (compliance, regulations) and informal (planning, collaboration)
7. Knowledge, information sources, and previous experience with the sector

8. Feelings towards coal seam gas, measuring positive emotions (pleased, optimistic) and negative emotions (angry, worried)
9. Attitudes towards CSG development – acceptance of CSG development in the shire

The survey will also include demographic questions to describe the sample of participants and their representativeness, as well as to explore demographic and geographic differences in the results.

Regional energy-futures narrative study

Developing concept maps

Narratives about the region's future would be distilled from online articles and media (e.g., newspapers, websites, forums, and regional newsletters) using artificial intelligence (AI) software called Leximancer to produce concept maps. Figure 3 shows a process for extracting concept maps from online media.

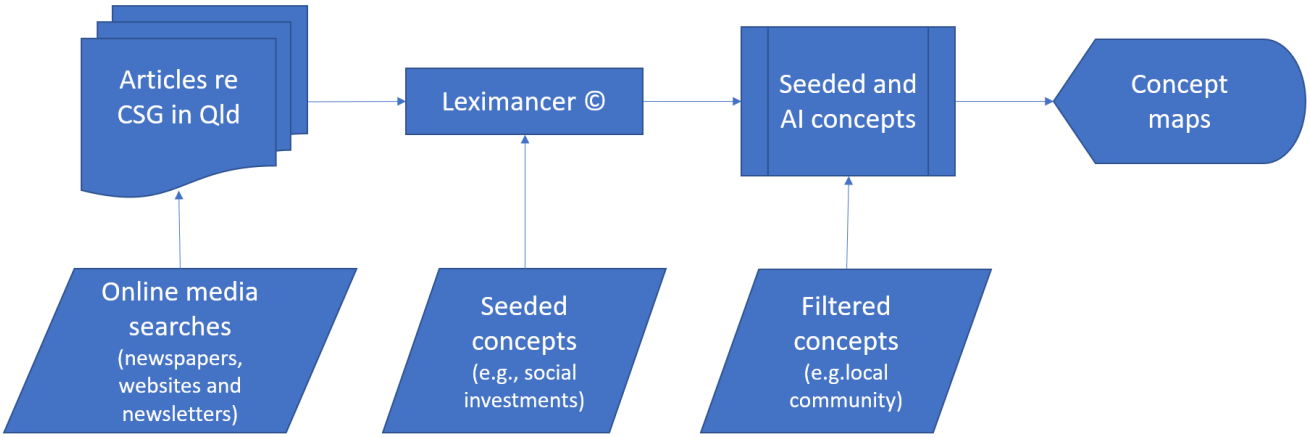

Figure 3 Process for extracting concept maps from online media

First, media articles from various sources about the CSG industry in Queensland would be gathered and downloaded from online sources. This may include searches on newspaper databases and web-scrapping, for example. Leximancer would then identify frequent words in these articles to start the AI learning process. Additional words and concepts can also be suggested or 'seeded' by the research team (e.g. social investments), which means Leximancer also looks for and adds to these words to the AI learning process. Concepts are clusters of words that commonly travel together in the same or adjacent sentences. The AI generated concepts can be filtered to remove any irrelevant concepts before Leximancer draws a concept map showing links between related concepts.

Figure 44 shows an example concept map taken from hearings into an explosion at a plastics factory where the pipework was implicated. These concepts can be future aggregated into themes or clusters of related concepts (see coloured spheres) and tables produced showing their relative frequency. In this example, pipework was the largest concept and theme.

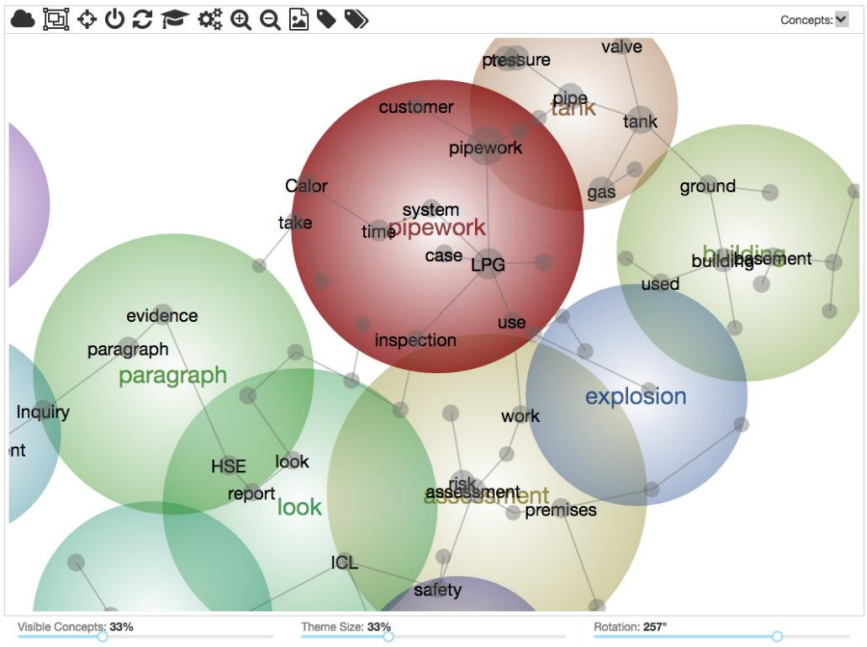

Figure 4 Example pipework theme[10]

Quotes underlying each concept and theme can be explored to assist with interpreting concept maps and their underlying narratives. Concept maps can be produced for specific periods of time and filtered to only keep text relating to a particular concept (e.g. local communities). Concept maps can be a powerful tool for exploring how people have discussed CSG development in Queensland over time, and how they may be discussing the region's future. This information will inform our discussions with key stakeholders and the wider community, as well as informing any edits to the 2024 survey and interpreting the survey data.

Ground-truthing the concepts

The concept maps will be discussed with key community stakeholders to gain their insights and views of the topics generated and to help ground-truth the interpretation of and description of the narratives. The concept maps will be used as an evidence base for discussing how the narrative about gas development in the region has changed over time, as well as the region's energy-futures. This research activity will involve a field trip to the Western Downs and eastern Maranoa regions where we will conduct small discussion groups or interviews with key community stakeholders.

The information from this activity will provide qualitative data to be used in three main ways:

1. to inform any additional survey items in the forthcoming survey (likely only a few items)
2. to help interpretation and discussion of the survey results
3. to inform development of the communication products

[10] https://doc.leximancer.com/doc/LeximancerManual.pdf p13

10. Project Inputs

Resources and collaborations

Researcher	Time Commitment (project as a whole)	Principle area of expertise	Years of experience	Organisation
Dr Rod McCrea (Social Scientist)	83 days	Community wellbeing and social licence to operate; survey design, sampling, and data analysis.	10 years	CSIRO
Dr Andrea Walton (Senior Social Scientist)	72 days	Social science research into community resilience and wellbeing, social licence to operate, social acceptance and trust, and perceptions of risk and benefits in relation to contested industries.	10 years	CSIRO
Dr Mitch Scovell (Post-doctoral fellow)	82 days	Risk perceptions, attitude formation, and communications in new industry technologies such as hydrogen production, storage, and utilisation.	2 years	CSIRO

Subcontractors (clause 9.5(a)(i))	Time Commitment (project as a whole)	Principle area of expertise	Years of experience	Organisation
Third party research company	20 days	Online computer assisted interviewing	10+ years	Q&A Research
Data visualisation tool development, provider to be confirmed	N/A	Communication and visualisation	5+ years	As per first column
Editor and graphic designer for communications products, provider to be confirmed	N/A	Editing and graphic design	5+ years	As per first column

Technical Reference Group

The research team would invite three members with diverse experiences and knowledge of coal seam gas development in the Western Downs to join the Technical Reference Group. For example:

- Dr Kathy Witt - Centre for Coal Seam Gas, University of Queensland. Kathy is a social scientist and has extensive experience in researching the impacts and benefits associated with Australia's onshore gas industry. Kathy has conducted the research for the University of Queensland's Boom Town Kit.
- Dr Neil Huth – Group Leader CSIRO Agriculture and Food. Neil has conducted all-encompassing research related to understanding the impacts of CSG development on farmers in the Western Downs and eastern Maranoa. His research in this area spans the 10-year period relevant to this research proposal.
- Fraser Power - Stakeholder & Advocacy Manager, Australia Pacific LNG. Fraser is an experienced Corporate Affairs professional specialising in reputation enhancement through the development and delivery of successful stakeholder engagement, advocacy programs, partnerships and communications for corporate, non-profit, government and energy sectors.

Budget Summary

Source of Cash Contributions	2021/22	2022/23	2023/24	2024/25	2025/26	% of Contribution	Total
GISERA	$0	$29,097	$117,010	$233,740	$0	80%	$379,848
- Federal Government	$0	$23,641	$95,071	$189,914	$0	65%	$308,626
- APLNG	$0	$4,001	$16,089	$32,139	$0	11%	$52,229
- QGC	$0	$1,455	$5,851	$11,687	$0	4%	$18,992
Total Cash Contributions	**$0**	**$29,097**	**$117,010**	**$233,740**	**$0**	**80%**	**$379,848**

Source of In-Kind Contribution	2021/22	2022/23	2023/24	2024/25	2025/26	% of Contribution	Total
CSIRO	$0	$7,274	$29,253	$58,435	$0	20%	$94,962
Total In-Kind Contribution	**$0**	**$7,274**	**$29,253**	**$58,435**	**$0**	**20%**	**$94,962**

TOTAL PROJECT BUDGET	2021/22	2022/23	2023/24	2024/25	2025/26	-	TOTAL
All contributions	**$0**	**$36,371**	**$146,263**	**$292,175**	**$0**	**-**	**$474,809**
TOTAL PROJECT BUDGET	**$0**	**$36,371**	**$146,263**	**$292,175**	**$0**	**-**	**$474,809**

11. Communications Plan

Stakeholder	Objective	Channel (e.g. meetings/media/factsheets)	Timeframe (Before, during at completion)
Regional community / wider public	To communicate project objectives and key messages from the research	Fact sheets (including development of one at commencement of project which will explain in plain English the objective of the project and one at the end of the project – these may be updated periodically as project progresses). Project progress reported on GISERA website to ensure transparency for all stakeholders including regional communities. Media release (optional)	From commencement of project and with updates as they come to hand. As required At completion
Government	To report on research being undertaken	Factsheets, newsletters, website or webcast	During
Gas Industry	To inform and enhance industry practices to maintain and enhance local community wellbeing.	Presentation of findings at joint Gas Industry/Government Knowledge Transfer Session	At completion
Government	To inform senior bureaucrats / ministers / policy makers	Present findings to Western Downs Regional Council and Maranoa Regional Council. The project report(s) will be finalised following feedback from these presentations as a way of further ground-truthing findings. Presentation of findings at joint Gas Industry/Government Knowledge Transfer Session	Near completion At completion
Community stakeholders	Presentation of research findings	Present findings to key stakeholders including Western Downs and Maranoa Regional Councils; local community groups connected to community wellbeing programs; farming and regional business groups. The project report(s) will be finalised following feedback from these presentations as a way of further ground-truthing findings. Presentation of findings through community forums or briefings	Near completion At completion
Regional community/wider public, government, scientific community and industry	To report on key findings	Development and release of interactive web-based data visualisation tool to tell the story behind the data and how things have changed over time Public release of final report(s) Finalisation of academic paper(s)	At project completion

12. Project Impact Pathway

Activities	Outputs	Short term Outcomes	Long term outcomes	Impact
Conduct the narrative study	Fact sheet	• Improved community awareness about present levels of their community wellbeing and perceptions of local onshore gas development. • Improved industry and government knowledge of what is important to communities in relation to onshore gas development. • A greater understanding among the scientific community of social licence factors in different phases of CSG development.	Uptake of research findings in industry and government resulting in standards, practices, guidelines, policies, programs, planning, and other initiatives related to onshore gas that reflect what's important to local communities in the past, now, and into the future.	The onshore gas industry operates in a socially, economically, and environmentally sustainable manner, supported by good industry and government governance.
Prepare the community wellbeing and attitudes towards gas survey	Revised survey and sampling frame			
Conduct the survey, analyse data, and commence reports	Survey data linked with previous years and analysed			
Draft report(s) and academic papers and present survey findings	Draft survey report(s) submitted to e-publish; survey findings presented to regional councils and groups (planned or completed); draft academic paper(s) outlined			
Communicate project objectives and findings more broadly	Final project report completed; visualisation tool developed; fact sheets completed; presentations to key stakeholders delivered; academic paper(s) submitted to e-publish			

13. Project Plan

Project Schedule

ID	Activities / Task Title	Task Leader	Scheduled Start	Scheduled Finish	Predecessor
Task 1	The narrative study	Rod McCrea Andrea Walton	01/03/2023	31/08/2023	-
Task 2	Survey preparation	Mitch Scovell	01/09/2023	31/12/2023	-
Task 3	Conduct survey, analyse data, commence reports	Rod McCrea	01/01/2024	30/06/2024	Task 1
Task 4	Draft report(s) and academic papers and present findings	Andrea Walton	01/07/2024	30/10/2024	Task 2
Task 5	Communicate findings more broadly	Rod McCrea Andrea Walton	01/03/2023	31/03/2025	Task 3

Task description

Task 1: The narrative study

OVERALL TIMEFRAME: 01/03/2023 - 31/08/2023

BACKGROUND: The narrative study will explore how issues have been discussed over the past decade in relation to CSG development in Queensland, as well as informing edits to the 2024 community wellbeing survey and assisting with interpreting the survey data.

TASK OBJECTIVES: 1) To establish Technical Reference Group; 2) To plan and prepare for media data collection and obtain ethics approval for interviews and small group discussion; 3) To collect online media data, analyse data, and develop draft concept maps and narrative themes; 4) To ground truth concept narratives with key community stakeholders using interviews or small group discussions.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

1. Technical Reference Group established
2. Ethics approval obtained
3. Narrative data collected, analysed and draft concept maps and narrative themes developed
4. Narrative themes discussed and ground-truthed with key community stakeholders

Task 2: Survey preparation

OVERALL TIMEFRAME: 01/09/2023 - 31/12/2023

BACKGROUND: While the survey methodology and sampling frame will remain essentially the same as in previous community wellbeing surveys, for comparability reasons, minor edits will be made to enhance the survey.

TASK OBJECTIVES: 1) To obtain ethics approval for survey; 2) To revise the survey instrument; 3) To prepare the sampling frame and organise data collection through third party market research company

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

1. Ethics approval obtained
2. A revised survey instrument prepared
3. Sampling frame and data collection organised

Task 3: Conduct survey, analyse data, and commence reports

OVERALL TIMEFRAME: 01/01/2024 - 30/06/2024

BACKGROUND: This task involves both assessing community wellbeing and attitudes to CSG development in the region in 2024, as well as linking this data to the 2014, 2016, and 2018 dataset to analyse any significant changes over the past decade.

TASK OBJECTIVES: 1) To conduct a representative survey of residents in the Western Downs and eastern Maranoa regions; 2) To assess community wellbeing and perceptions of CSG development for 2024 and how this has changed over time (2014 – 2016 – 2018 – 2024); and 3) To commence write up of findings

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

1. A weighted 2024 dataset for representativeness prepared and linked to previous data sets
2. Analyses underway, writeup commenced and report(s) drafted

Task 4: Draft report(s) and academic papers and present findings

OVERALL TIMEFRAME: 01/07/2024 - 30/10/2024

BACKGROUND: Project report(s) and paper(s) will be drafted, and the findings presented to regional councils and other key stakeholders. The project report(s) will be finalised following feedback from these presentations as a way of further ground-truthing our findings.

TASK OBJECTIVES: 1) To draft survey report(s); 2) To communicate survey findings; 3) To draft academic papers

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

1. Survey report(s) submitted to e-publish
2. Survey findings presented to regional councils (planned or completed)
3. Knowledge transfer session (planned or completed)
4. Academic papers drafted

Task 5: Communicate project objectives and findings more broadly

OVERALL TIMEFRAME: Full duration of project

BACKGROUND: This task involves conveying our findings with wider public and academic audiences. An interactive digital product (web or app based) will be developed to enable audiences to view the data visually and discover the story behind the data. This involves graphic web designers and developers, and science communication professionals to co-design and develop the visualisation tool with the research scientists.

TASK OBJECTIVES: 1) To finalise report(s), data visualisation, and other communication products; 2) To communicate findings to a range of audiences including key government, industry, and community stakeholders; 3) To finalise academic papers

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

1. Final project report(s)
2. Visualisation tool
3. Fact sheet(s)
4. Presentations to key stakeholders on project
5. Academic papers submitted to e-publish

Project Gantt Chart

		2022/23				2023/24												2024/25								
Task	**Task Description**	**Mar 23**	**Apr 23**	**May 23**	**Jun 23**	**Jul 23**	**Aug 23**	**Sep 23**	**Oct 23**	**Nov 23**	**Dec 23**	**Jan 24**	**Feb 24**	**Mar 24**	**Apr 24**	**May 24**	**Jun 24**	**Jul 24**	**Aug 24**	**Sep 24**	**Oct 24**	**Nov 24**	**Dec 24**	**Jan 25**	**Feb 25**	**Mar 25**
1	The narrative study																									
2	Survey preparation																									
3	Conduct survey, analyse data, commence reports																									
4	Draft report(s) & academic papers & present findings																									
5	Communicate findings more broadly																									

5. Budget Summary

Expenditure	2021/22	2022/23	2023/24	2024/25	2025/26	Total
Labour	$0	$31,371	$93,263	$206,175	$0	$330,809
Operating	$0	$5,000	$1,000	$9,000	$0	$15,000
Subcontractors	$0	$0	$52,000	$77,000	$0	$129,000
Total Expenditure	**$0**	**$36,371**	**$146,263**	**$292,175**	**$0**	**$474,809**

Expenditure per task	2021/22	2022/23	2023/24	2024/25	2025/26	Total
Task 1	$0	$33,464	$21,641	$0	$0	$55,106
Task 2	$0	$0	$30,536	$0	$0	$30,536
Task 3	$0	$0	$91,097	$0	$0	$91,097
Task 4	$0	$0	$0	$127,607	$0	$127,607
Task 5	$0	$2,907	$2,989	$164,569	$0	$170,465
Total Expenditure	**$0**	**$36,371**	**$146,263**	**$292,175**	**$0**	**$474,809**

Source of Cash Contributions	2021/22	2022/23	2023/24	2024/25	2025/26	Total
Federal Govt (65%)	$0	$23,641	$95,071	$189,914	$0	$308,626
APLNG (11%)	$0	$4,001	$16,089	$32,139	$0	$52,229
QGC (4%)	$0	$1,455	$5,851	$11,687	$0	$18,992
Total Cash Contributions	**$0**	**$29,097**	**$117,010**	**$233,740**	**$0**	**$379,848**

In-Kind Contributions	2021/22	2022/23	2023/24	2024/25	2025/26	Total
CSIRO (20%)	$0	$7,274	$29,253	$58,435	$0	$94,962
Total In-Kind Contributions	**$0**	**$7,274**	**$29,253**	**$58,435**	**$0**	**$94,962**

	Total funding over all years	Percentage of Total Budget
Federal Government investment	$308,626	65%
APLNG investment	$52,229	11%
QGC investment	$18,992	4%
CSIRO investment	$94,962	20%
Total Expenditure	**$474,809**	**100%**

Task	Milestone Number	Milestone Description	Funded by	Start Date (mm-yy)	Delivery Date (mm-yy)	Fiscal Year Completed	Payment $ (excluding CSIRO contribution)
Task 1	1.1	The narrative study	GISERA	Mar-23	Aug-23	2023/24	$44,085
Task 2	2.1	Survey preparation	GISERA	Sep-23	Dec-23	2023/24	$24,428
Task 3	3.1	Conduct survey, analyse data, commence reports	GISERA	Jan-24	Jun-24	2023/24	$72,878
Task 4	4.1	Draft report(s) and academic papers and present findings	GISERA	Jul-24	Oct-24	2024/25	$102,085
Task 5	5.1	Communicate findings more broadly	GISERA	Mar-23	Mar-25	2024/25	$136,372

6. Intellectual Property and Confidentiality

Background IP (clause 11.1, 11.2)	**Party**	**Description of Background IP**	**Restrictions on use (if any)**	**Value**
				$
				$
Ownership of Non-Derivative IP (clause 12.3)	CSIRO			
Confidentiality of Project Results (clause 15.6)	Project Results are not confidential.			
Additional Commercialisation requirements (clause 13.1)	Not Applicable			
Distribution of Commercialisation Income (clause 13.4)	Not Applicable			
Commercialisation Interest (clause 13.1)	**Party**		**Commercialisation Interest**	
	CSIRO		N/A	
	APLNG		N/A	
	QGC		N/A	

7. References

Inserted as footnotes within document.