Export report: Social impact assessment of the Narrabri Gas Project

Prof Stewart Lockie

26 April 2017

1. Declaration

I have read the Uniform Civil Procedures Rules 2005: Schedule 7 Expert Witness Code of Conduct and agree to be bound by the provisions under the code.

I have made all inquiries which I believe desirable and appropriate to matters addressed in this report. No matters of significance, to my knowledge, have been withheld.

2. About the author

2.1 Contact details

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2.2 Highest academic qualification

Doctor of Philosophy (Rural Sociology), Charles Sturt University, 1997

2.3 Current appointments

- Distinguished Professor of Sociology and Director of the Cairns Institute at James Cook University
- Fellow of the Academy of the Social Sciences in Australia
- International Council for Science (ICSU) Committee for Scientific Planning and Review.
- Adjunct Professorial appointments at the Australian National University and Charles Darwin University
- Foundation Editor, *Environmental Sociology*
- Editorial Board member: *International Journal of Comparative Sociology*, *Sociology of Development* and *Ecosystem Health and Sustainability*

2.4 Relevant experience

Prof Lockie has undertaken social impact assessments on behalf of government agencies, community groups and development proponents in the resources sector. More details are available on request. His contributions to the theory and practice of social impact assessment are evident in:

- Membership of the International Principles for Social Impact Assessment Project Team.[1]
- Inclusion of Prof Lockie's publications in the International Association for Impact Assessment's *Key Citations Series: Social Impact Assessment*[2] and *Guidance for Assessing and Managing the Social Impacts of Projects.*[3]
- Contribution of four chapters to *Developments in Social Impact Assessment*.[4]

3. Adequacy of the Narrabri Gas Project SIA

This section addresses the adequacy of the methodology and evidence base that underpin the Narrabri Gas Project Social Impact Assessment.

According to Appendix T1 of the Project EIS, the SIA is based on:

- The Secretary's Environmental Impact Assessment Requirements for the project.
- *International Principles for Social Impact Assessment* published by the International Association for Impact Assessment (IAIA).

Additionally, as stated in Chapter 10 Approach to the Impact Assessment, the Narrabri Gas Project SIA incorporates a qualitative risk assessment based on *AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines*.

While none of these documents prescribe specific assessment methodologies and techniques they do provide criteria against which the adequacy of SIAs might be assessed. For example, the *AS/NZS ISO 31000:2009* standard outlines 11 principles of risk management including requirements that they explicitly address uncertainty, are based on the best available information, and are transparent and inclusive.

Insight into SIA methodology can be drawn from IAIA's recent *Guidance for Assessing and Managing the Social Impacts of Projects* (2015) which summarises the phases of SIA as:

i. Understand the issues: understand social area of influence, assemble baseline data, initiate participatory processes, scope issues etc.
ii. Predict, analyse and assess the likely impact pathways: social changes and impacts, indirect impacts, cumulative impacts, affected party responses, significance of changes and project alternatives.
iii. Develop and implement strategies: address negative impacts, enhance benefits and opportunities etc.

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[1] www.iaia.org/uploads/pdf/IAIA-SIA-International-Principles.pdf
[2] www.iaia.org/uploads/pdf/KeyCitations_SIA.pdf
[3] www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf
[4] www.e-elgar.com/shop/developments-in-social-impact-assessment

iv. Design and implement monitoring programs: indicators to monitor change, evaluation and periodic review etc.

This guidance document does not prescribe specific methodologies or techniques for use in project SIAs but highlights those considered typical of best practice social impact assessment.

Methodological steps undertaken in the Narrabri Gas Project SIA are broadly consistent with the IAIA guidance document. These steps included: (1) scoping; (2) establishing a social baseline; (3) impact identification and management; and (4) development of mitigation measures and management strategies. A number of stakeholders were consulted concerning potential issues and management strategies related to their respective areas of interest.

Through these steps, the Narrabri Gas Project SIA profiles impacted communities and identifies a range of impacts and management strategies plausibly relevant to the project.

The social baseline documented in Appendix T1, Section 4 draws on ABS data, other (unspecified) SIA reports and local planning documents. It would benefit from integration of material generated by the Gas Industry Social and Environmental Research Alliance (GISERA) funded project *Social Baseline Assessment of the Narrabri Region of NSW in Relation to CSG Development*.[5] While this project is not yet complete, the Phase 2 report released early 2017 provides more comprehensive information on community expectations and perceptions than that detailed in the Narrabri Gas Project SIA.[6]

However, while the sources of baseline data reported in the Narrabri Gas Project SIA are generally clear, the report is not transparent in relation to the evidence on which many subsequent claims about impact significance, likelihood and consequences are made, nor who has been involved in making these assessments.[7] This lack of transparency makes it difficult to evaluate whether the assessment of impacts is based on the best available information or inclusive of all stakeholders with an interest in the project. As IAIA's SIA guidance document states:

> "Research methods and analytical procedures must be fully disclosed to: enable replication of the research by another practitioner; enable peer review of the adequacy and ethicality of the methodology; and to encourage critical self-reflection on the limitations of the methodology and any implications for the results and conclusions (p. 33)."

SIA requires practitioners to make predictions that cannot be extrapolated directly from baseline conditions and trends. To assess the potential implications of development for impacted communities they use a range of tools including impact pathway analysis, multi-criteria analysis and (as used in the Narrabri Gas Project SIA) risk analysis. These tools rely, in turn, on expert judgement, local knowledge and, importantly, post-development studies of

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[5] https://gisera.org.au/project/social-baseline-assessment-narrabri-region-nsw-relation-csg-development/

[6] Walton. A., McCrea, R., Taylor, B. and Jeanneret, T. (2017) *Understanding local community expectations and perceptions of the CSG sector: Social baseline assessment: Narrabri project – Phase 2*. CSIRO Report: CSIRO Australia.

[7] Exceptions to this observation include the attribution of expectations concerning the likely impact of this project on crime and antisocial behaviour to police.

similar projects implemented elsewhere.[8] It is possible the Narrabri Gas Project SIA has used one or more of these. However:

- If expert judgement has been used it is important to specify who these experts were (including EIS team members) and what qualifies them to exercise judgement in this context.
- If local knowledge has been used it is important, again, to specify which stakeholder groups have contributed local knowledge and in relation to which impacts.
- If comparative analysis of other studies has been undertaken a comprehensive list of sources should be provided.

4. Social impact predictions and mitigation measures

In the absence of more detail concerning how impact significance has been assessed, and by whom, it is not possible to provide a comprehensive review of the impact predictions and mitigation measures identified in the SIA. This section will comment, therefore, on several issues in respect of which I believe more information is required before the possibility of more significant social impacts can be ruled out.

4.1 Cumulative impacts

Of particular importance is the need for more detail on developments in the region likely to generate cumulative impacts given their potential to amplify the magnitude and significance of those arising from the Narrabri Gas Project and to undermine, as a consequence, the adequacy of impact mitigation measures identified in the SIA.

The Secretary's Environmental Assessment Requirements for the project include:

> "assessment of the likely impacts of all stages of the development, including any *cumulative impacts*, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice… (emphasis added)."

Appendix T1, Section 6.3.8 identifies several other resource extraction projects proposed for the region and notes the potential for these to create competition for labour and housing, particularly during the construction phase (see also Chapter 29 Cumulative Impacts).

The potential, however, for cumulative impacts on labour and housing markets appears not to have been considered further in the assessment of risk or in the identification of mitigation strategies (Appendix T1, Section 7). These consider only those demands for labour and accommodation associated directly with the Narrabri Gas Project.

Other issues in relation to which cumulative social impacts might plausibly be expected but which are not addressed in the SIA include the demographic profile of affected communities,

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[8] Burdge, R. (2003) The practice of social impact assessment – background. *Impact Assessment and Project Appraisal* 21(2): 84–88. Available at www.tandfonline.com/doi/abs/10.3152/147154603781766356

demands on social infrastructure, changes to community identity, stress and anxiety associated with uncertainty, and the prevalence of crime and other antisocial behaviour – each of which were important foci for interactive and cumulative impacts during the recent expansion of coal mining in Queensland's Bowen Basin.[9]

Again, I am not claiming that these do present significant risks in relation to the Narrabri Gas Project but that the evidence presented in the SIA is not sufficient either to rule them out or to evaluate the adequacy of management and mitigation strategies.

4.2 Social cohesion

The GISERA funded research cited above into Narrabri community expectations and perceptions of the CSG sector (Walton et al. 2017) suggests that water is the dominant concern among community members and that many hold positive attitudes towards the project and project proponent. Those with negative attitudes towards the project tend to consider the risks to water and other values unmanageable and/or the proponent and government untrustworthy. Participants in the study described the community as polarized and reported feeling pressure to adopt particular views, feeling maligned for their own views, and so on.

I do not wish to express a view on whether Narrabri residents ought to hold positive, neutral or negative attitudes towards the Gas Project. The key issue here is that conflict over the project should be acknowledged in the SIA and the risk this presents, longer term, to social cohesion should also be acknowledged and managed proactively.

Adherence to the Agreed Principles of Land Access along with regular communication through various channels as identified in Appendix D, Section 6 are both relevant and proactive steps to reduce conflict and subsequent risks to social cohesion. However, given the polarization already evident in the community it would be reasonable to conclude that additional strategies are warranted. Walton et al. (2017) identify a number of considerations relevant to the development of such strategies. These include ongoing support for independent research, respect for differing views, taking steps to ensure local capture of benefits, and attention to the long-term future of the Narrabri community.

The Community Benefit Fund identified in the SIA ought to provide opportunities to implement strategies for fostering community cohesion and, indeed, Appendix T1, Section 7.8 does foreshadow use of the fund to support environmental activities, research, community events etc. However, no detail is provided on governance and decision-making arrangements for the fund nor what '$120 million through the life of the project' might mean in the short to medium term. Transparency in relation to such matters is needed to build trust in the proponent and to reduce anxiety among those concerned about community impacts.[10]

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[9] Petkova, V., Lockie, S., Rolfe, J. And Ivanova, G. (2009) Mining developments and social impacts on communities: Bowen Basin Case Studies', *Rural Society*, 19(3): 211–228. Available at www.bowenbasin.cqu.edu.au/Petkova%20et%20al.%20Rural%20Society%2009.pdf.

[10] Porter, M., Franks, D. and Everingham, J-A. (2013) Cultivating collaboration lessons from initiatives to understand and manage cumulative impacts in Australian resource regions.

4.3 Life of project planning including closure

Project closure is identified in the Narrabri Gas Project EIS as a potential source of social impacts including loss of employment, business opportunities and population (subject to socioeconomic conditions at the time). Experience elsewhere suggests that key conditions will include the level of economic dependence on the project, the adequacy of environmental rehabilitation, and the extent to which the project has shaped local and regional population flows.[11]

Appendix T1, Section 7.10 of the EIS states that prediction and management of social impacts arising from closure will be addressed through the closure planning process. Closure planning is treated, in other words, as beyond the scope of the EIS.

However, as the above quote taken from the Secretary's Environmental Assessment Requirements for the project states, assessment is required "of the likely impacts of *all stages of the development*" (emphasis added). The Secretary also refers to two relevant guidance documents on project closure including *Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry* (Commonwealth Government)[12] and the *Strategic Framework for Mine Closure* (ANZMEC-MCA).[13] Both documents stress that closure planning is integral to the full project life cycle and that consultation should occur throughout the full life cycle.

Treating closure as an integral part of the whole project life cycle is reflective of international best practice. The IAIA *Guidance for Assessing and Managing the Social Impacts of Projects* (2015) states that, projects are, by definition, fixed term activities. While uncertainty over the lifespan of extractive projects is inevitable due to commodity market volatility, closure strategies should be in place at project commencement and plans should be updated regularly to reflect changes in the project and the operating environment. Failure to plan for closure from the earliest stages of project development risks undermining trust in project proponents and missing opportunities to leave a positive legacy.

Appendix T1, Section 7.10 of the EIS expresses the expectation that sustained benefits will arise from the Community Benefit Fund and that these benefits will continue beyond the life of the project. This may well be the case. However, clear consideration of closure in the

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Resources Policy 38: 657–669. Available at www.sciencedirect.com/science/article/pii/S0301420713000184.

[11] Lockie, S., Franetovich, M., Petkova-Timmer, V., Rolfe, J. and Ivanova, G. (2009) 'Coal Mining and the Resource Community Cycle: A Longitudinal Assessment of the Social Impacts of the Coppabella Coal Mine', *Environmental Impact Assessment Review*, 29, 330–339. Available at www.bowenbasin.cqu.edu.au/Lockie%20et%20al%20Env%20Impact%20Assess%20Review%2009.pdf.

[12] www.industry.gov.au/resource/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf.

[13] www.sernageomin.cl/pdf/mineria/cierrefaena/DocumentosRelacionados/Strategic-Framework-Mine-Closure.pdf.

design of the fund and in design of impact mitigation strategies more generally will improve the chances of this happening.

4.4 Positive impacts for Indigenous residents

The EIS documents outline a comprehensive approach to managing cultural heritage and commit the proponent to negotiating suitable agreements with native title holders. Additionally, the SIA (Appendix T1, Section 7.3) notes opportunities to generate positive social impacts through support for Aboriginal employment and business opportunities. These might be considered particularly important to the social legacy of the Narrabri Gas Project given comparatively low incomes and employment levels among Indigenous residents.

Despite stated commitment to implement a *Diversity and Equal Opportunity Policy* to 'maximise Aboriginal employment including for contractors' no detail is provided as to the concrete measures that will be taken to ensure this goal is realised. Again, this is not to say the project will not generate positive social outcomes for Indigenous residents but that the mechanisms intended to generate these benefits are not clear.

5. Further observations

Unconventional gas development can have positive social impacts including a reversal of the net out-migration of young people evident in many rural areas.[14] Concern and conflict in relation to the potential for negative impacts, moreover, tends to be highest during the construction phase of resources projects with concern then shifting to longer-term considerations of community viability.[15]

As noted above, a lack of transparency in relation to how social impacts have been assessed in the Narrabri Gas Project EIS makes it difficult to evaluate the adequacy of their assessment or of management and mitigation measures. This is just as true, moreover, of opportunities to maximise positive social impacts as it is of strategies to avoid or minimise negative social impacts.

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[14] Measham T.G. and Fleming D.A. (2013) Impacts of unconventional gas development on rural community decline: working paper, November 2013, CSIRO, Australia. Available at https://gisera.org.au/wp-content/uploads/2016/04/socioeco-proj-1-rural-decline-workingpaper.pdf.

[15] Walton, A., Williams, R. and Leonard, R. (2017) Community perspectives on coal seam gas development during two phases of industry activity: construction and post-construction. *Rural Society* 26(1): 85–101. Available at www.tandfonline.com/doi/full/10.1080/10371656.2017.1293546