

Unconventional Gas – energy saviour or environmental problem?

Deborah Kerr

Manager – Natural Resource Management, National Farmers' Federation







The Farm







The positives

- Supplementary income
- On farm infrastructure improvements
 - e.g. gates, fences, roads
- Possibility of treated water for irrigation
- Off farm employment opportunities
 - But a double edged sword
- Investment in a range of community infrastructure and programs





The negatives

- Loss of privacy and peaceful enjoyment of property
 - Including concerns about children
- Stress
 - The "unknown" before
 - The "known" during negotiations and construction
- Time consumed with researching, negotiating, managing
- Additional costs
 - Not all are covered by a land access agreement
- Difficulty in making business planning decisions
- "Forced" land access negotiation
 - Seen as no choice
- Massive changes in communities National Farmers'





Challenges

Regulatory

- Inefficient land access
- No confidence in water science
- Different legislative frameworks (mining, water, petroleum)
- Rehabilitation and legacy

Environment

- Fracking fears
- Massive concerns over water quantity, quality and aquifer integrity
- Pest and weeds, dust and other impacts on agricultural production

Practices

- Different for each company
- Poor disclosure on scale
- One size doesn't fit every farm business^{FEDERATI}

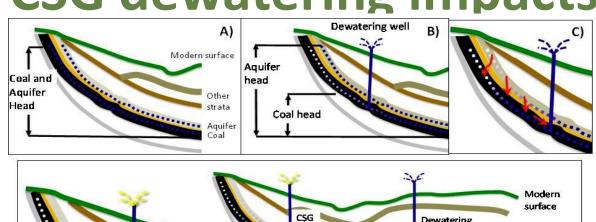


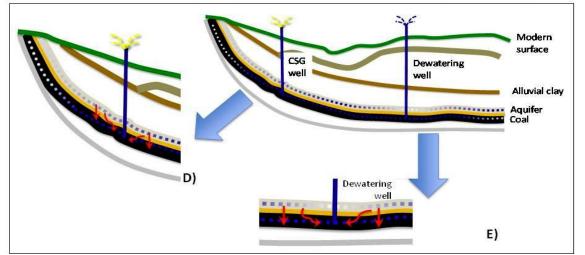
CSG dewatering impacts

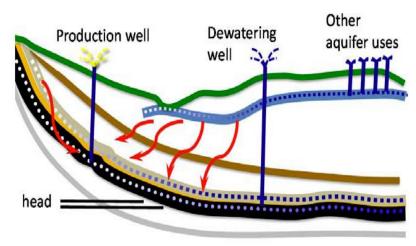
Change in hydraulic head

Overlying or underlying aquifer: capillary recharge coal measure

Cascade effect to other aquifers

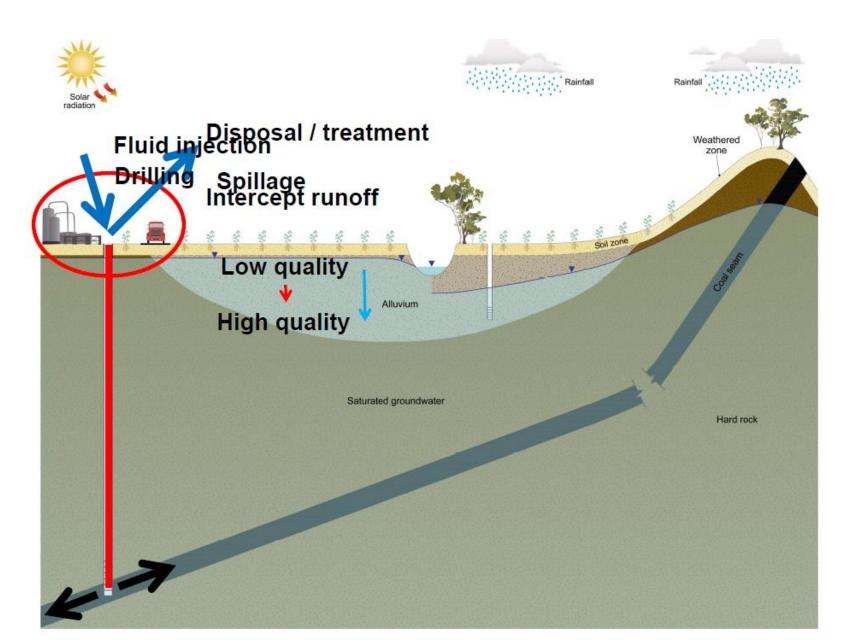






Variables
coal measure
proximity to
aquifers,
aquifer water
availability
(porosity and
thickness),
permeability,
amount of
fracturing
and folding

Water quality impacts





Community challenges

- Huge influx of people into underprepared communities
 - e.g. rental and services competition
- Competition for phone and internet band width at peak times (end of shift)
- Wages paid in resources sector caused difficulties for engaging farm labour
 - "unfair" playing field
- FIFO gambling and prostitution
- Increasing resistance and activism

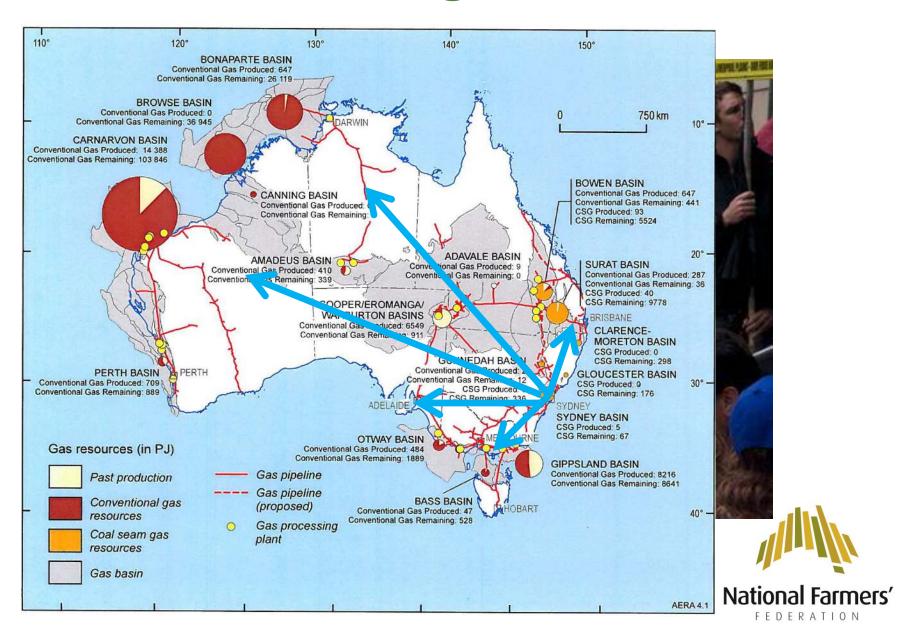


Helpful initiatives Better regulatory framework

- - In Queensland, the Land Access Code
 - SCER National Harmonised Regulatory & **Land Access Frameworks**
- Better education, e.g. AgForward
- More investment in science, but needs to be reality tested
 - But there won't be perfect knowledge
- Better engagement by CSG companies
- **Independent bodies**
 - NSW Land & Water Commissioner
 - Qld GasFields Commission
 - IESC



Activism widening due to concerns





CSG industry are not the only targets...







NFF does not condone bullying farmers

NOTICE

A PERSON'S COMMON LAW RIGHT TO ENTER
IS EXPRESSLY WITHDRAWN

ADMITTANCE BY INVITATION ONLY TO ALL PERSONS & ENTITIES

OTHERWISE TRESPASS APPLIES

HCA 1991 171 CLR 635 F.C. 91/004



- Unauthorised signs placed on farm gates
- Farmers are being hassled, including rude and abusive behaviour
- Farmers agreeing to have gate signs to be rid of this behaviour





An emerging call for a more balance response from agriculture

I am very concerned about farmers promoting the "Lock the gate" type campaigns. Giving support and credibility to these organisations is extremely dangerous for the farming sector. How do we educate farmers so that they understand they are being used?





Social licence can be transient...

- Farmers' social licence is hard won
 - And subject to whims of interest groups, e.g. animal welfare and tobacco
- The conduct of some CSG companies is better than others
 - Most are working hard but cultural shift still needed, from top to bottom including subcontractors
 - Industry is also concerned about their "cowboys"





Media Release

25 June 2013

PR/075/13

NSW Farmers withdraws support for mining template access agreement

NSW Farmers today withdrew its support and endorsement of a joint template Land Access Arrangement for Minerals Exploration under the Mining Act 1992.

"Although we have had some very positive feedback on the quality of the template, it has come to our attention that a coal company in NSW has inappropriately represented an access agreement, drafted by it, as being a direct reflection of the conditions and previsions in our joint template, when it clearly is not.

"In addition, it has been reported to us that some of the access agreements presented by that same company have retained the coversheet of our original agreement with the NSW Farmers logo, but the template provisions have been changed.

Actions such as this taint the whole industry – momentum undoing any good work so far





Case Study – Working Effectively Together

- Some company's have worked constructively with farmers
 - Save the CSG company money
 - Benefitting the farm business, e.g.
 minimising the CSG footprint or new infrastructure
- Innovative land access agreements
 - Santos and Origin
- Some farmers providing services to CSG,
 e.g. start up engineering

National Farmers'



Minimum Disturbance Well Site



Maximum Disturbance Flow Line – post seeding and rain







Agriculture needs...

- No long term impact on farm business or environment and NO legacy issues
 - Treat and beneficially use CSG water
- Identify all scientific tools that can be used to closely monitor actual or perceived environmental impacts
- Baseline data expanded
 - water level and quality, weeds, light noise, methane emissions, OLF paths etc





For the farm business.....

- Comprehensive farm plans prior to CSG activity negotiations
- Priority to allow normal farm operations to be carried out, spraying, irrigating, mustering
- CSG must be seen as an asset
- Minimise farm level footprint
- CSG to operate to ag BMP standards when on property
- Area wide development plans





Some NFF suggestions for the industry

- Social licence
 - Finance remaining GAB cap & pipe program
- Rehabilitation
 - Post well and gas field closure, and a program for remediation where required
- Transparency
 - e.g. replicate USA's FracFocus
- Include a third stage (as proposed in Qld)
 - Exploration, pre-production <u>feasibility</u> and production
- Land Access
 - Review all agreements for best practice
 - Ombudsman?



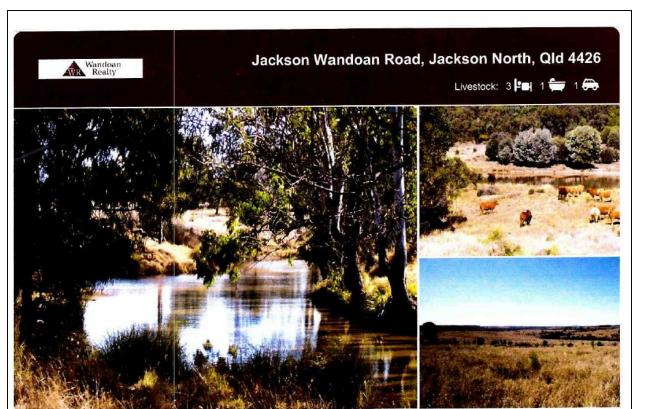


Need to get right the science (before the rush), engagement and the legislative framework



CSG wells have not been seen as a beneficial farm asset in advertising for property sales....





'LARAPINTA' - Great grazing property with additional income!

FOR SALE

"LARAPINTA" consists of 2550 acres (1034ha) south of Wandoan fronting the Jackson Road. 10 klms from the massive QGC development. Predominately Brigalow country but also very well grassed with buffel.

Sub divided into several paddocks with excellent fencing which is set up for easy mustering, all heading towards a programmentained set of timber yards this bere watered from set and fams and a creek.

Extra income is derived from a gas well and water is also being sold to the resource sector, there also might be the possibility of securing gravel from a ridge on the property.

The property has a solid older. The large reported world make for a great family home with room for everyone. Along with sheds and a good bitumen road not far from Wandoan, this could just the investment or new lifestyle you've being looking for. This is an easy care breeder property currently being run by an absent owner.

Opportunities like this only become available every now and then, so don't miss this one. The owners are very serious sellers.

Upcoming Inspections

Inspect by appointment, contact agent.

Wandoan Realty - Wandoan 32 Royd Street Wandoan, Qld 4419



Nigel Dwyer 0429 065 768

...until now





Coexistence

- Agriculture and resources are the backbone of Australia
 - And have much in common
- Need to fully realise the opportunities for agriculture, regional communities and the CSG industry
- But requires recognition of the HUGE CULTURAL AND PRACTICAL shift that is occurring in TRADITIONAL agricultural landscapes
 - Requires patience and respect































