GISERA
Gas Industry Social and Environmental Research Alliance

Understanding natural gas impacts and opportunities on agriculture in the South East of South Australia

Knowledge Transfer Session

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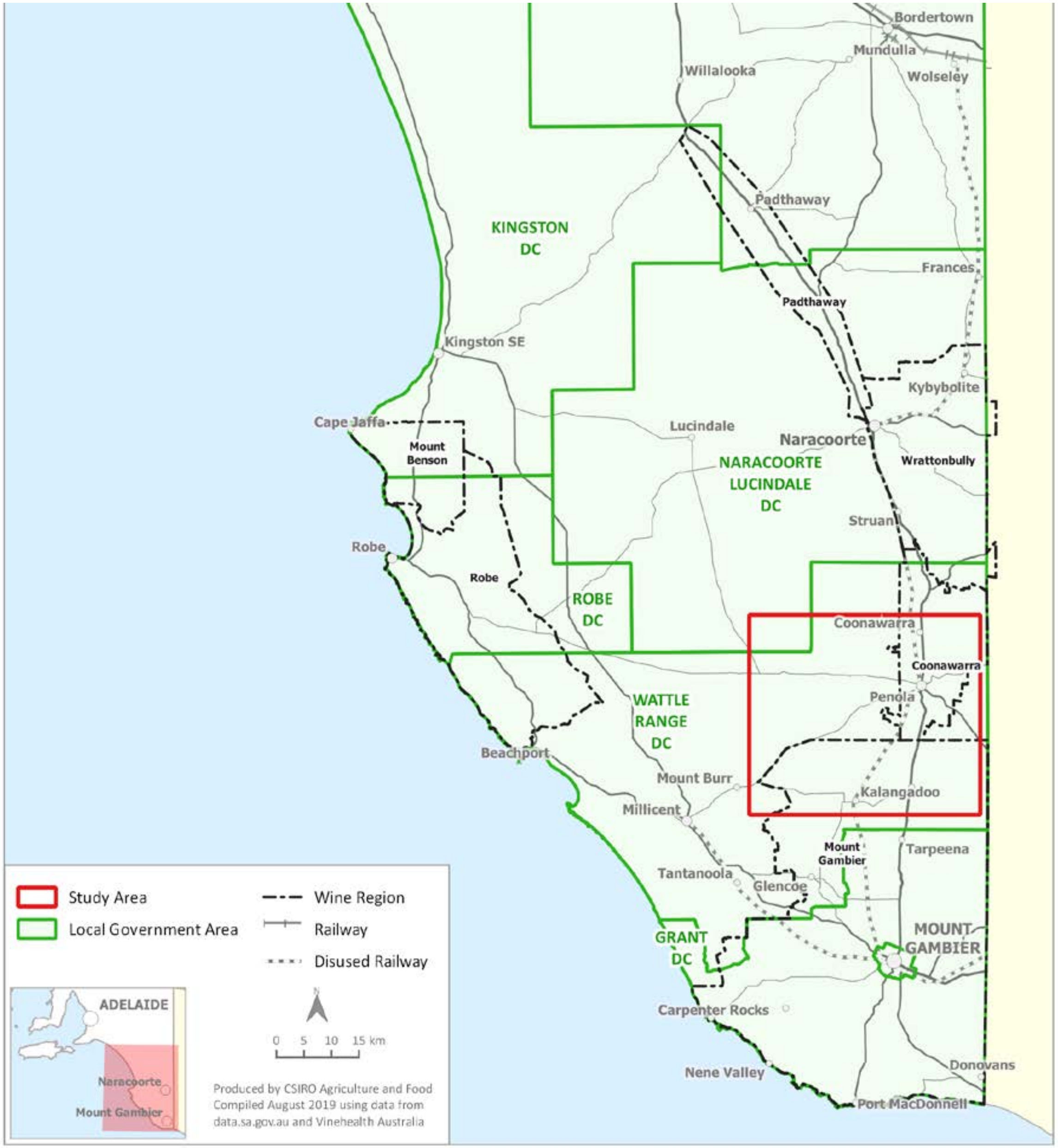
Background

- Agriculture is the major industry in the SE region
- Our focus was on agricultural stakeholders
- Our objective was to collect and communicate perspectives of representative local agricultural stakeholders on impacts and opportunities relating to gas development in their region
- Our aim is to inform policy considerations relating to the interaction between primary industry stakeholders and the gas industry

The study region



Gas activity

Study Area

Tenements

Petroleum exploration licenses (PEL)

Petroleum production license (PPL)

Petroleum retention licenses (PRL)

Gas storage exploration licence (GSEL)

Gas storage retention licence - GSRL 27

Gas storage exploration licence application (GSELA)

Geothermal exploration licence - GEL 223

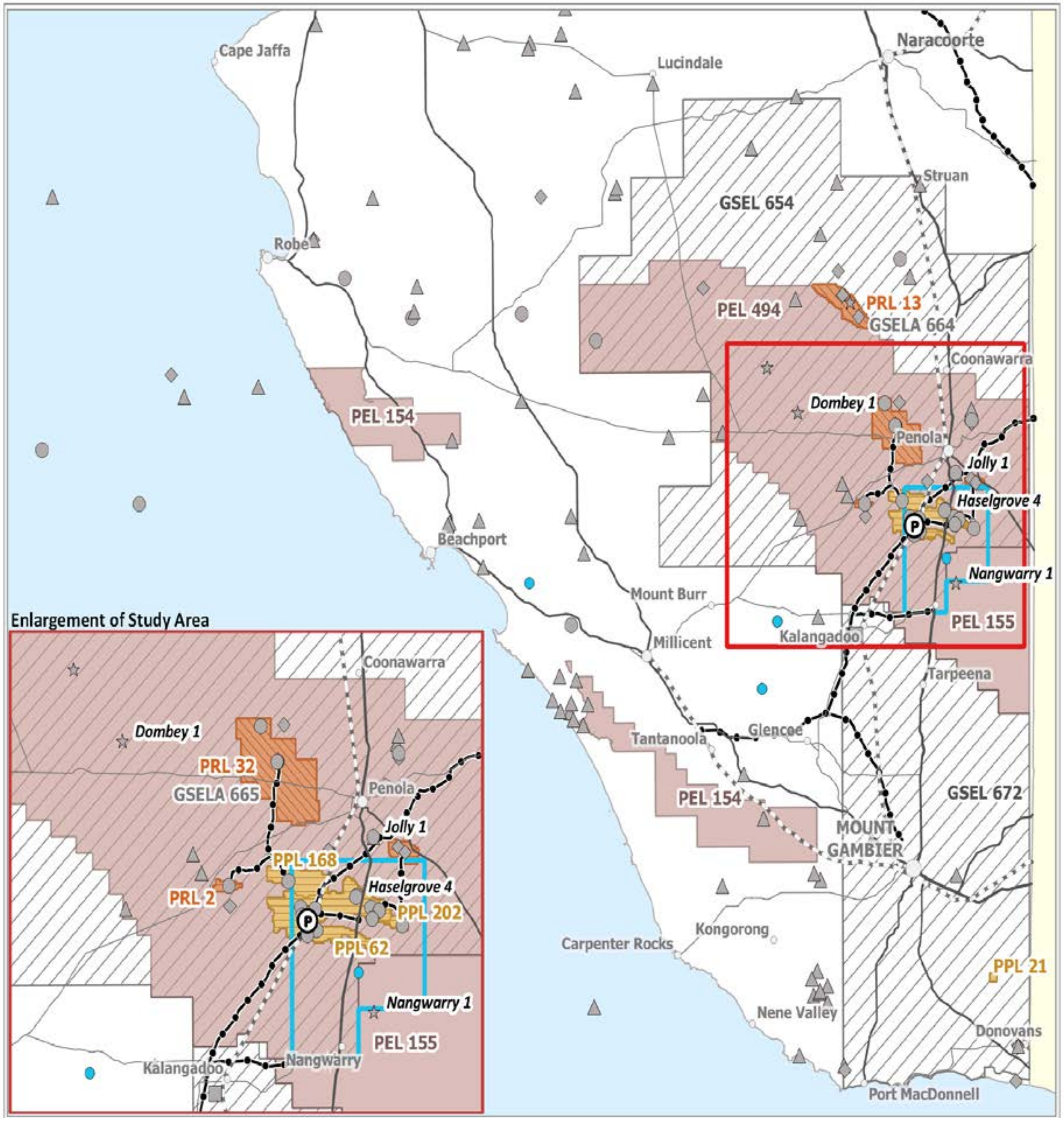
Petroleum and geothermal wells

CO_2	Oil show
Dry hole	Proposed
Gas show	Geothermal

Petroleum infrastructure

Gas pipeline | Gas plant

Railway - Disused



Land use

Grazing - 49%

Forestry - 31%

Nature Conservation - 7%

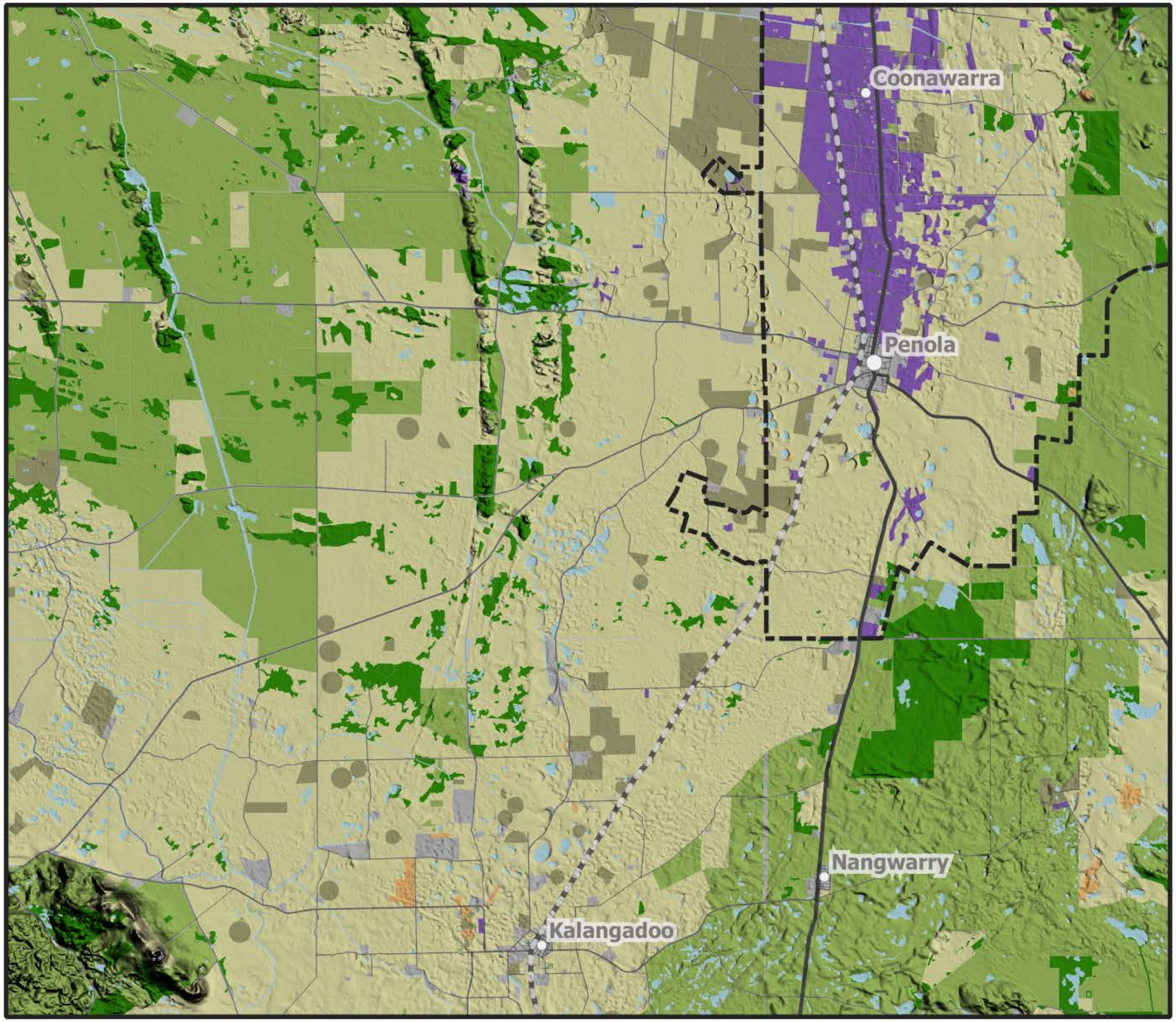
Cropping - 4%

Viticulture - 3%

Water or Wetlands - 3%

Other - 3%

Horticulture - 0.2%



2014 data

Method

- Face to face in-depth interviews (completed Feb 2019)
- Purposeful stratified sample
  - 20 interviewees
  - Cropping, Livestock, Viticulture/wine
  - Unbranded and branded products
- Localities: Penola (5); Coonawarra (4); Millicent (3); Kalangadoo (3); Naracoorte (2); Wattle Range (1); Fox (1); Conmurra (1)

- Sectors: Livestock (sheep and beef) (7); Broadacre cropping (4); Grape growing (3); Wine making (3); Potatoes (2); Farm consultants (2); Rural land specialists (1); Local government (1)
- Comparisons with other regions

Guiding questions

- Have you personally experienced any interaction or impact with the gas industry in the SE?
- What impact, if any, has the gas industry had on primary industries in the SE; your primary industry activity?
- What could the gas industry have **done differently** to manage its impact on primary industries?
- Are you aware of future development plans for the gas industry in the SE?
- **What impacts** do you think these developments will have on primary industries in the SE; your primary industry activity?
- What do you think the SE gas industry might look like in **10 years' time** compared to now?
- What do you think the **gas industry should do** to manage its impact on primary industries in the future?
- If the SE gas industry had double the level of current activity in 10 years' time, what impact do you think that would have on primary industries in the SE; your primary industry activity?
- **Do you see benefits** from SA producing more of its own gas?

Findings

Pride and protectiveness for a ‘unique’ and highly productive region

- ‘Clean and green’ image, with promotion by govt. and industry
- Diversity of production
- Critical quality groundwater resource

I don’t think people understand the significance of our underground water enough. This is very, very unique.

..a tourist coming to the region will want to see the beautiful vineyards and the clean, green farming.

In some places you can have water and not the soil types and in other places you can have the soil types and not the water. Well the South- East has actually got the best of both..

Past conventional gas activities have been well accepted by primary producers

- Generally positive view of past activity
- Positive experiences by the few with direct contact
- No negative experiences reported

It's happened for years now, probably 30-40 years in the South-East. ***We haven't seen a bad impact yet****. If it continues that way it's all well and good*

Local farmers have been dealing with it for years, so ***15-20 farmers have got wells and have had no issues****.*

Their impact hasn't been significant enough in the South-East at this stage to be a huge consequence. So, if they manage that in the future, ***if they kept it at the levels it's at the moment it's okay****.*

A shift in community attitude: Jolly 1 2014

- A highly visible (and audible) gas activity
- The potential for growth and unconventional gas activity was raised
- A sense of lack of consultation

*Previously the gas industry in the South-East drilled away from the main roads, were **not visible, they had a low profile**, and they were somewhat sensitive to visual amenity concerns.*

*The gas sector **has been exploring conventionally in this area for 25 years** and prior to that rig going up in Penola, they had done that in a collaborative way. When they started that activity and there was talk of fracturing being used extensively **they really put a lot of people offside.***

*…talking about fracking at that point and **that made a lot of us realise that we needed to be active about this**, otherwise it would just roll on.*

Unconventional gas activity is seen to be different and more risky

- Gas industry acceptance does not extend to the prospect of unconventional gas
- ‘Fracking’ raises new concerns of an ‘unnatural’ process
- The aquifers are the primary focus of concern

*I think once you start with fracking, then you’re talking about a **whole different ball game**. Because you’re adding something that’s not naturally there…*

*Sticking any **chemical in the ground**, probably not a good idea.*

*My concerns for the future come more with fracking, rather than conventional gas...I don’t have the ability to have dams here, so **if I lose my stock water from the underground aquifer, we’re done.***

Risk Vs reward: when perceived local reward is low

- Local benefits from gas industry are perceived as very limited
- Risks are perceived to be low but the consequences of any aquifer damage extremely high
- Primary producers are considering inter-generational timeframes when considering risks

The fracking thing, it should be fine, but the risk is that ***our water system is actually worth more than what the gas system is.***

So, ***concrete will deteriorate over time*** *eventually and metal will deteriorate over time, eventually…from there on after we've got a problem.*

That's the difference between farmers and miners, that ***it might not be my lifetime, it might be my son or daughter or granddaughter's..***

Perceptions are real when it comes to managing brands

- The region has important and highly valuable brands in highly competitive markets
- Reputational damage can occur by association not just environmental damage
- Publicity about the local gas debate is seen as a risk

*If something goes wrong down here and there's bad publicity, the **effect on those companies that are marketing heavily** from the region will be affected most*

*Perception is a tricky risk to manage, because **perception isn't always reality, but once that perception takes hold, it's hard to change***

*..our issue is that whenever we have to confront the media about potential negative effects of gas mining in our area **we're negatively promoting the area***

There's discomfort at the extreme anti-gas campaigning

- Some campaigning has been too extreme for many
- Coal seam gas experience in Qld and misinformation appears to influence some perceptions
- But there is a major pragmatic 'middle ground'

The issue of groundwater..I..have some serious concerns about, but to drag a whole lot of other arguments in there has really alienated me from the anti-fracking movement, because ***they're talking with emotion and not with fact****.*

…if it becomes a fracking type thing, where ***they seem to have to grid the area*** *for the extraction, then that would be a significant impact*

A lot of people have been ***swept along by the perceived risks*** *of fracking and now there's sort of an overlap of not wanting any gas exploration.*

..they have been a little bit extreme and their process is not necessarily quite right either, but ***most of us are in the middle***

Many have only modest expectations of gas industry growth

- Many doubt the potential for major expansion
- Perceptions exist of limited gas reserves and high costs
- But others see this leading to the push for unconventional practices

*I don't really understand why they persist in this area, because **they don't ever seem to get a lot.***

*I'd be surprised if they were exploring to the extent they are now if they didn't have **government subsidies to do it.***

*The gas industry **struggles in this area because of the ability to be able to extract the gas** and unless technology changes, that's when the moratorium will open up again and I don't know..*

Finding the way forward

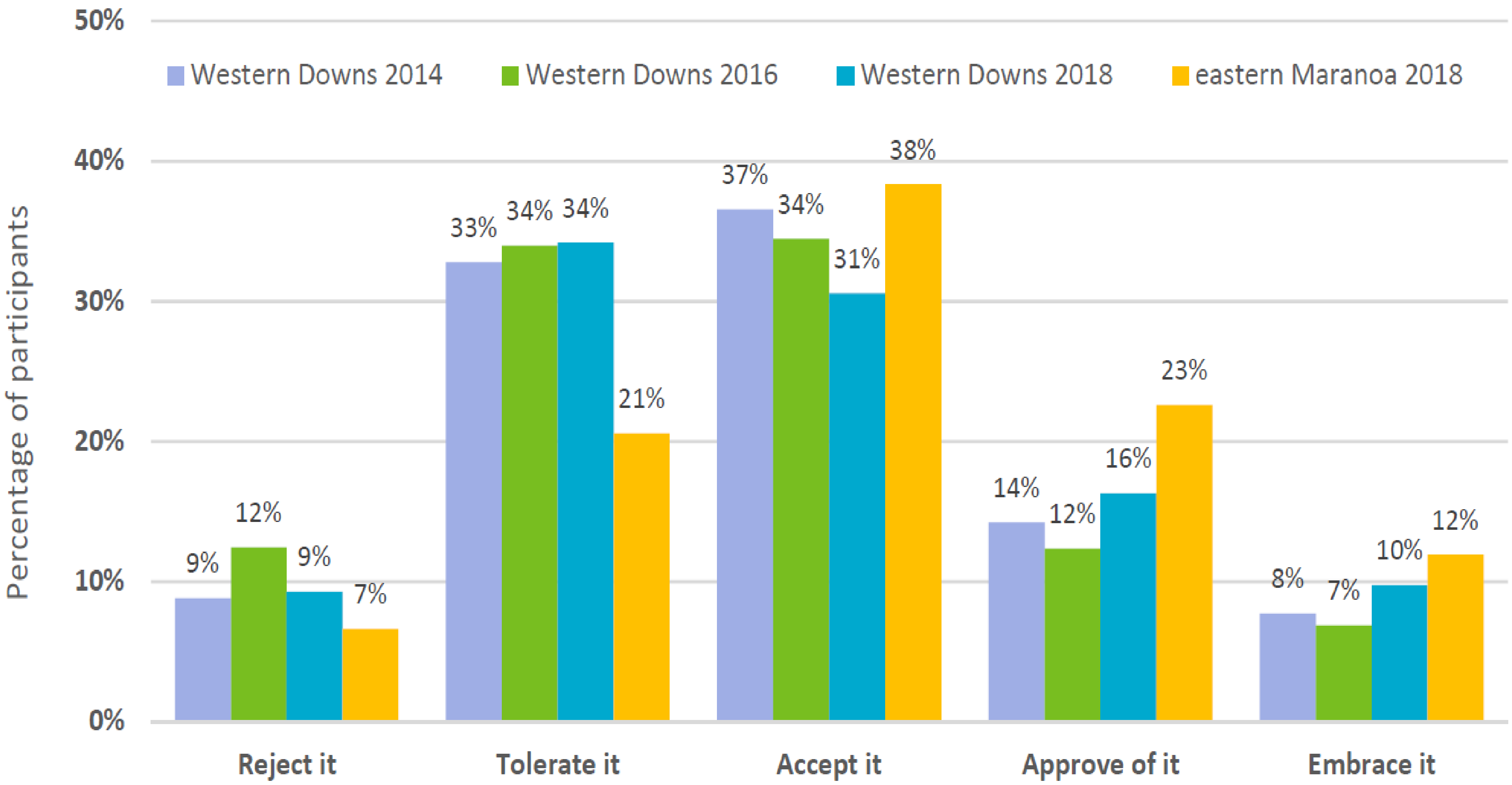
- There's catching up to do as past communication and engagement strategies weren't seen to be pro-active enough
- A base of primary producer support for the gas industry does exist
- And there is a major pragmatic 'middle ground'

*They allowed the fearmongering and the anti-fracking groups to get ahead of the debate and **they were too late in trying to put a balance into the discussion**. That's where they've fallen down. Now there is an expectation that there's fracking going on in the Limestone Coast.*

*It just seems to be a well goes in every now and again. **If it's allowed to progress in a natural way, it will all be okay.***

*If they put more gas here then **it's just another little hole in the paddock**. I mean it would **be terrible if there was 30-40 but one or two is probably not that much of a hindrance** on us*

The large middle ground: Attitude to Coal Seam Gas in the Western Darling Downs in 2014/16/18 and eastern Maranoa in 2018



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Walton and McCrea, 2018

Summary

- There is positive acceptance of the relatively small scale of past gas activity even though local benefits are considered minor

- And the 'clean and green' image of the region has been developed in the presence of the gas industry

Summary

However, when considering future gas industry developments:

- Stronger, clearer and more pro-active communication of the activities, technology, and facts from trusted sources are now needed
- Past and future local benefits from the gas industry are currently considered to be low
- The very low tolerance of risk to the highly valued long-term sustainability of the ground water resource needs to be fully recognised

Questions raised

- Can the absence of negativity about past experience help inform understanding of the future?
- Can likely future scale be put in the context of the accepted historical 'small' scale of gas activity?
- The need for local 'brands' and regional agri-environmental reputation to be managed in the presence of not only a gas industry, but a gas discussion or debate needs further consideration and analysis

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Thank you