

Narrabri Gas Project: Info, Myths & Facts

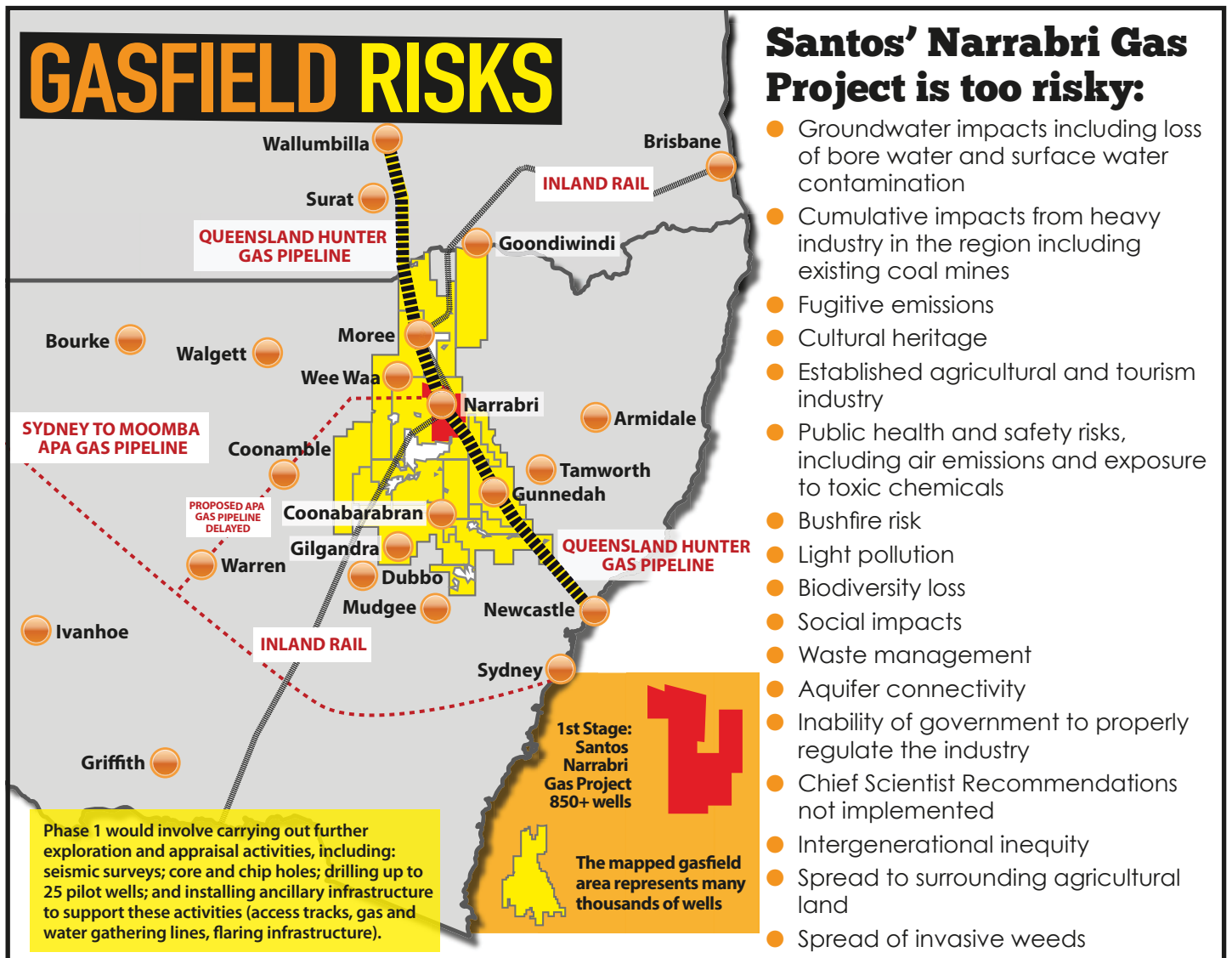
What is Coal Seam Gas?

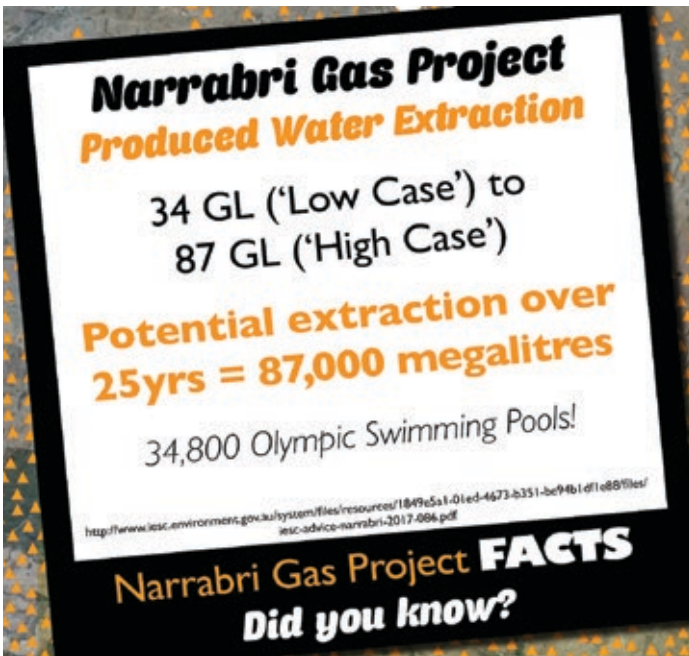
Coal seam gas (CSG) is methane (CH⁴) gas that is held in coal seams. It differs from conventional gas, which has been Australia's primary gas source, because it requires unconventional methods to extract.

These methods involve removing the groundwater from the coal seam, producing enormous volumes of waste. A cocktail of dangerous chemicals is used to drill, with or without fracking.

About Narrabri Gas Project

Santos, is proposing to drill 850+ CSG wells in the Pilliga forest and surrounding farmland over 4 phases. At 95,000 hectares, this is the largest project ever proposed in NSW. The project is also the most controversial, generating a record-breaking 22,700 formal objections. Across 3.2 million hectares of North West NSW, community surveys show that 96% of people wish to remain gasfield free.





Coal Seam Gas Risks Our Water

MYTH: CSG will have limited environmental impact
FACT: The Narrabri Gas Project would risk groundwater that sustains farms and communities across inland Australia. Santos has to drill through the **crucial recharge aquifer** of the Great Artesian Basin (GAB) to get to the gas. Dewatering the coal seam will eventually cause aquifer draw down and loss of head pressure to bores.

Toxic wastewater and drilling fluids are known to spill and leak, contaminating water and ecosystems. In the Pilliga, Santos has already been fined for **contaminating an aquifer with uranium** and other heavy metals and for a spill of 10,000L of wastewater that caused a forest 'dead-zone' which is still unremediated 10+ years later.

Wastewater could produce up to **840,000 tonnes of salty waste** with no known disposal solution. Santos would be required to dispose of this waste within 150km of the project radius.

Failure of CSG well casings is common. Steel casings erode and fail – causing gas leaks and contamination of fresh water supplies.*

In QLD, the Office of Groundwater Impact Assessment has shown that 101 water bores will be affected in the next three years and 574 bores in the long-term.

Aquifer connectivity and faulting have not been properly assessed in the Pilliga. The Water Expert Panel has highlighted these concerns. A CSIRO/ GISERA assessment of the fault is due on 31/12/20.** Santos refused to reveal any knowledge of this fault line to the Water Expert Panel assessing the project.
 *<https://tinyurl.com/y8b2w2w9> **<https://tinyurl.com/ybqxhmg4>

Fracture Stimulation: Santos have only committed to not frack as part of this particular Development Application. NSW Planning has highlighted a short condition to this effect.

Agriculture & CSG

MYTH: Agriculture & CSG can co-exist
FACT: The Queensland Experience has shown us otherwise. Insurance company IAG* said for customers who "have operational CSG or shale gas activities or infrastructure on their property, such as a coal seam gas well, we will be unable to provide [public] liability cover as part of their insurance policy".
 The insurance recommendation of the Chief Scientist has not yet been implemented.
 *<https://tinyurl.com/y7bw9y1f>

Chief Scientist's Recommendations not fully implemented

MYTH: Coal seam gas is safe if regulated
FACT: In February 2020 a Parliamentary Inquiry reported on 'The implementation of the recommendations contained in the NSW Chief Scientist's Independent Review of Coal Seam Gas Activities in New South Wales.*' The report

NSW LOCAL GOVERNMENT UNCONVENTIONAL EXPOSURE TO GAS TENEMENTS



Coal seam gas well & flare in the Pilliga forest



revealed **only 2 of the 16** original Chief Scientist's recommendations to regulate the industry have been fully implemented and just six partially.

[*https://tinyurl.com/ych7uxvv](https://tinyurl.com/ych7uxvv)

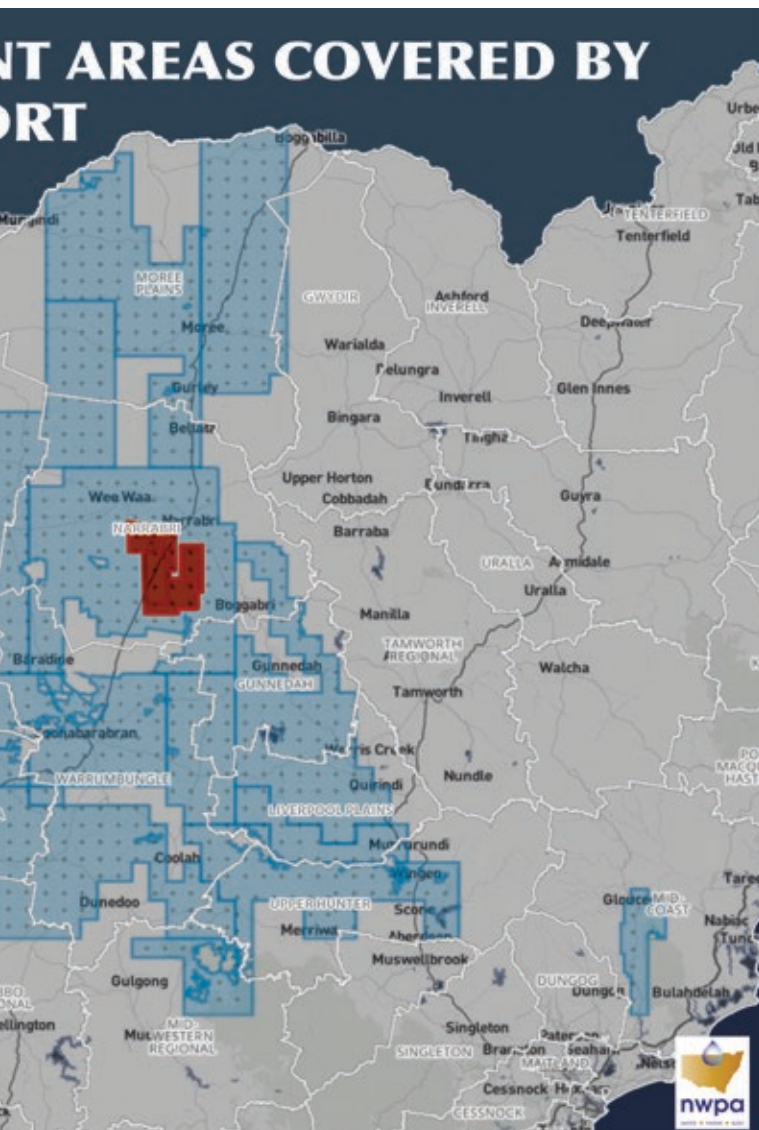
Fugitive Emissions

MYTH: Gas is a transition fuel between coal and renewables

FACT: Volatile organic compounds and hydrocarbons, including the carcinogen benzene, are released from vents, holding tanks, ponds, compressors and other infrastructure. Experts now say that gas is not cleaner than coal. A report* by Australian energy industry veteran Dr Andrew Grogan reveals that Santos has underestimated emissions. Stories published show Santos has misrepresented** the gas composition data of the Gunnedah Basin.

In 2014 the CSIRO measured emissions at 37 CSG wells in QLD and 6 in NSW. Only 3 had no fugitive emissions. Air pollution poses potential risks to workers and people living nearby. Methane, a potent greenhouse gas, adds to the serious health risks of climate change.

[*https://tinyurl.com/y9w8bpay](https://tinyurl.com/y9w8bpay) [**https://tinyurl.com/ybhu29cf](https://tinyurl.com/ybhu29cf)



Narrabri Gas Project

Fugitive Gas Emissions

200 TJ of gas production per day will emit 2-17% leakage from wellheads, gathering lines & other infrastructure

Up to 30TJ PER DAY of fugitive emissions will be in the low level atmosphere in the vicinity of Narrabri

Gas production statistic: <http://www.iesc.environment.gov.au/system/files/resource/1849e5a1-01ed-4673-b351-8e94b1d1e88/files/iesc-advice-narrabri-2017-086.pdf>
 Fugitive emission statistic: <http://vimeo.com/206027889>

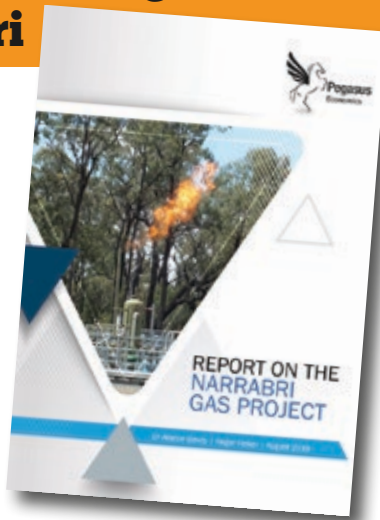
Narrabri Gas Project **FACTS**

Did you know?

NSW doesn't need gas from Narrabri

MYTH: NSW needs Narrabri Gas for energy security and reliability.

FACT: NSW does not have large gas reserves. Gas was produced from coal in gasworks in Sydney until a pipeline from Moomba SA supplied conventional gas to the city in 1976. Santos provided the gas and AGL retailed it, reducing the city's pollution. Since then all NSW gas has been imported from other states except around 4-5% from AGL's coal seam gas wells in Camden.



Pegasus Economics published a report* in 2019 revealing that the Narrabri gas project **would do nothing to reduce prices**, and would instead be the most expensive gas in eastern Australia at over \$9/ GJ.

Australia is swimming in export gas and Moomba in South Australia has 20 years supply of gas and a pipeline to Sydney. The east coast of Australia has multiple import terminals in the planning stages that could be built before the Narrabri Gas Project.

*<https://tinyurl.com/y9mx53qv>

Bushfires & flaring are a catastrophic risk

MYTH: Santos has a bushfire management plan.

FACT: The Pilliga Forest is prone to bushfire. The Rural Fire Services (RFS) say gas extraction and infrastructure **escalate the risk** of a fire spreading and increase the danger to firefighters. The risk of gas infrastructure igniting and further inflaming bush fires is too great for some volunteer firefighters who refuse to fight fires in gasfields.

Santos has not demonstrated its claim that the cumulative risks of initiating a bushfire from wells and processing facilities is low. The company's hazard register does not appear to include hazards and risks to public safety from*:

- Blowouts - the uncontrolled release of gas from a well after pressure control systems have failed.
- Risks associated with the power generation plant at Leewood
- Pipeline inspection gauge launch and recovery
- Other infrastructure within the pipeline corridor e.g. a second pipeline and power transmission cables

* <https://tinyurl.com/yat92uxg>

Jobs; but not many

MYTH: Coal seam gas will create jobs in Narrabri, giving the town's economy a significant boost.

FACT: In four years, Chinchilla, a similar size town to Narrabri, went from a prosperous rural town, to a booming gas mining town, to a welfare town with high levels of unemployment, crime and drug addiction. Currently houses are being sold for less than a 1/3 of the build cost.

Santos' gasfield **poses direct and indirect threats** to existing long term sustainable industries, such as agriculture, tourism and manufacturing (recently revealed)**.

The Narrabri gasfield would destroy jobs in other local industries. For every job created in the CSG industry in QLD, 1.8 jobs were lost in agriculture and 0.9 jobs lost in the service sector.*

* <https://onlinelibrary.wiley.com/doi/full/10.1111/1467-8489.12043>

** <https://www.afr.com/companies/energy/santos-narrabri-jobs-claims-under-fire-20200622-p554up>

Timeframe	Who will get the jobs	Number	% of Total (rounded)
Operational Phase for lifetime of project	Existing Narrabri Roles	50 (actually 22)	15%
	New Narrabri Roles	94.5	15%
	People relocating to Narrabri	92	15%
	People filling roles and living elsewhere	200.5	58%
TOTAL		345	

The initial construction boom will only last 3 years

EIS, Executive Summary & Social Impact Statement

Narrabri Gas Project FACTS
Did you know?

Community opposition

MYTH: People in the Narrabri district want the Narrabri Gas Project to start.

FACT: Door to door surveys found 28% of Narrabri residents support the project, **52% were against** and 98% were in favour of renewable energy development.* In shires surrounding Narrabri, 98.7% of the population, that's 7,000 people over 3.2 million hectares, have vowed to oppose the Project and to block pipelines, linking the project to the east coast gas network.

Thirty-five councils in NSW oppose the development of CSG in their region, and another fourteen councils have declared their concern about CSG.

* https://www.csfgreenorthwest.org.au/narrabri_doorknock_results