

GETTING THE BALANCE RIGHT

The Basin Sustainability Alliance (BSA) has serious concerns about the unrestrained development of the coal seam gas (CSG) industry across Queensland. While the rapid advancement of the energy and mining industry in Queensland provides economic benefits to the state, the lack of monitoring and research is alarming.

Under the current system, there is a very real danger that CSG development will damage vital natural resources, and subsequently food and fibre production, for future generations.

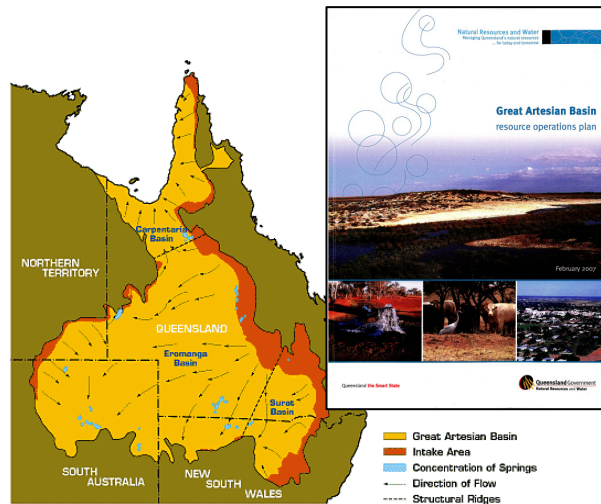
BSA is an organisation representing the concerns of landholders and communities across the Great Artesian Basin (GAB). BSA is committed to working with government and industry to achieve a coal seam gas industry that has minimal environmental, economic and social impacts while still providing necessary jobs and wealth for the state.

BSA aims to preserve the GAB, local alluvial aquifers and the contribution of agriculture and rural communities to Australian society and economy. We must have an open information exchange between stakeholders and the community, and genuine engagement with decision makers to ensure we get the balance right.

IMPORTANCE OF THE GREAT ARTESIAN BASIN

The Great Artesian Basin is an aquifer system that underlies more than 20% of Australia. It's a vital water source of some 200,000 people and underpins \$3.5 billion of annual agricultural production. Since 2007 the GAB has been managed under the GAB Resource Operations Plan (ROP). The plan protects flows to springs and base flow to watercourses; it protects existing allocations and provides a process for new allocation to be made in areas of available water.

New allocations identified in the plan for future use are 23,000ML of general reserve and 10,000 ML for projects of State or regional significance. The plan ensures that any release of any new water from the basin does not put at risk the natural assets of springs and any future development will be managed within sustainable levels.



However, the Coal Seam Gas industry – which could potentially extract up to 350,000 ML of groundwater per year (equal to about two-thirds of Sydney Harbour) – is exempt from complying with the GAB ROP. BSA views this as unacceptable and irresponsible.

THE KEY ISSUES

Groundwater Issues:

- **Risk of inter-aquifer transfer** and concerns about poor drilling operations and supervision with up to 40,000 wells within the Surat Basin region alone. Impacts on Groundwater Quality are a serious concern to water users. The Walloon Coal Measures usually contain a much poorer quality water than the underlying and overlying aquifers. Any cross-contamination could result in deterioration of water quality – making it unusable for human consumption, town water supplies and agriculture.
- **Claims by CSG companies that the Coal Walloon Measure is not a GAB aquifer** – when the official Government scoping study states that it is.
- **There is limited baseline data against which to measure aquifer drawdown** – While CSG companies are meant to be monitoring groundwater impacts, these reports are not independent nor are they publicly available. Additionally, there is no independent body currently monitoring groundwater quality.

- **Impact on allocated aquifers** – BSA has concerns that the water from aquifers that lie above and below will be drawn down (drain into coal seams) as water is extracted from Coal Walloon Measure. There is little to no research on the long term impacts.

Land Surface Impacts:

- **Salinity concerns** - Extracted associated CSG water contains high concentrations of salt with reports of up to 200,000 tonnes of salt extracted annually as part of the dewatering process. In the past this salty water has been stored in evaporation dams – causing major concerns about the impact on soil salinity and seepage into shallow aquifers. We must ensure that new guidelines requiring this water to be treated before it is stored are being policed.
- **Positioning of wells and infrastructure** close to homes, schools and intensive livestock operations will have a negative impact. Location of infrastructure close to bushland is a fire hazard.

Environmental Safety:

- **Fracking** - Concerns about the process of fracking and the chemicals used.

Social & Economic Impacts:

Landholders and townships are facing a range of social and economic impacts.

- Legal costs and stress on innocent landowners
- Loss of privacy and security
- Lack of time to respond to EISs
- Impacts on land values
- Lack of confidence to develop and expand rural enterprises

Effectiveness of Make-Good Provisions:

‘Make good’ provisions are a band-aid solution rather than ensuring the development is done right in the first place. BSA has concerns that the water commission is not adequately resourced to police and manage ‘make good’ provisions. Make good provisions currently are triggered by prescribed

decreases in water levels. BSA would also like to see water quality included in the make good provisions. BSA questions whether the CSG industry as a whole has the capacity to “make good” water if significant damage is done to the GAB.

THE WAY FORWARD

Research BEFORE Action: BSA is calling for a moratorium on further Coal Seam Gas (CSG) development until the full environmental impacts on groundwater systems and agricultural land are understood and addressed.

Industry collaboration: There must be sharing of information and data industry-wide to achieve meaningful monitoring, research into environmental impacts and new technologies.

Policy Changes: The management and impacts of the Coal Seam Gas industry must be acknowledged in the GAB Resource Operations Plan. No fracking should be permitted until the health and environmental impacts have been fully investigated.

Investigate Reinjection: BSA believes that reinjection may be one of the only answers to minimising the impact of extraction and recharging the GAB, but it will not support reinjection until scientifically conclusive research has been conducted into the correct and safe process. BSA would like to see an industry wide task force formed to fully investigate reinjection methods. Our goal would be to have at least 75% of associated water safely reinjected or substituted for existing groundwater.

Invest in new technologies: BSA encourages investment by Government into fast-tracking research into new technologies such as improvements to directional drilling technology, and exploring the development of technology to allow a closed system - where the gas and water is extracted and the water immediately reinjected safely.

WE MUST WORK IN HARMONY

Landholders, environmental groups, CSG companies and all levels of Government must work together to find win-win solutions. BSA believes we are custodians of these valuable natural resources for future generations and we must work together to get the balance right.

To find out more go to www.basinsustainabilityalliance.org
BSA Chair Ian Hayllor on 0428 795548 or
BSA Vice Chair Andrew Rushford on 0428 581527

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