[redacted]

From: [redacted]
Sent: Monday, 9 June 2025 3:38 PM
To: Regional Planning Interests Act
Cc: [redacted]
Subject: Submission RPI25/004 Arrow CASS Tie-in
Attachments: Attachment_1 to RPI25-004 submission [redacted].pdf; Attachment_2 to RPI25-004 submission [redacted].pdf; Attachment_3 to RPI25-004 submission [redacted].pdf

The Chief Executive of the Regional Planning Interests Act 2014
Department of State Development, Infrastructure and Planning
The RPI Act, Development Assessment Team
PO Box 15009, City East QLD 4002
By email RPIAct@dsdilgp.qld.gov.au

Submission to Regional Interest Development Approval Application
RPI25/004 – Arrow CASS Tie-in

Dear Chief Executive,

Unfortunately, due to time constraints, I am unable to make a comprehensive submission to RIDA application RPI25/004 by Arrow Energy (Arrow), however I respectfully request that you consider this limited submission both as a submission to RPI25/004 and as general information to be considered under section 49(2) of the *Regional Planning Interests Act 2014* (**RPI Act**).

1. Arrow has clarified that its application relates to a resource activity which is a tie-in valve and a 12-metre section of pipe. I consider that Arrow is seeking to a create a falsehood to deliberately restrict assessment to simply that, when clearly a tie-in valve and 12-metre section of pipe have cannot function in isolation.

   Section 12 of the RPI Act provides that a *resource activity* is:

   a. an activity for which a petroleum lease under the *Petroleum & Gas (Production & Safety) Act 2004* (**P&G Act**) is required to lawfully carry out (i.e., the production of coal seam gas from a reservoir); or
   b. an activity authorised by the P&G Act for a petroleum lease.

   Arrow has said that its *Condamine Alluvium Substitution Scheme* (CASS) delivered through its *Beneficial Use Network* (BUN) of pipelines is a necessary component of its production of methane (coal seam) gas, for compliance with its Cth. Environmental Approval EPBC 2010/5344.

   A tie-in valve and a 12-metre section of pipe are a component of a resource activity under the P&G Act. They are also a component of the overall resource activity authorised by the petroleum lease i.e., the production of coal seam gas, and a component of what I presume is an incidental activity authorised by the P&G Act – the CASS BUN.

   However, the tie-in **valve** and 12-metre section of **pipe** has no discrete activity, it is not an activity of its own but a component of an activity - like a CSG well in the production stage is, or a CSG well in the digging phase is. In the case of a CSG well the object on/in the land is the well, therefore it has two components which must be managed and in the case of a RIDA application, assessed under the RPI Act – the *presence* of the well on the land, and the *activity* of the well on the land, both of which cause separate impacts. The principle of separation of **form** and **function** is embedded in the P&G Act, which defines a petroleum well as a physical structure and the stages of a production well as separate and identifiable activities (e.g., digging, producing, maintaining, plugging are distinct activities under the Act) .

The tie-in valve and 12-meter pipe function is solely to enable diversion of produced water that has been treated for Condamine Alluvium substitution, which is already being transported through a pipeline. It would thus be facetious to assess their impact to SCA, PAA PALU, and RSWS Condamine Alluvium merely based on form, rather than both their **form and function**.

I believe that due to the poor wording of the application and supporting document it is possible, even likely, that a court of competent jurisdiction could read a RIDA decided by the chief executive on this tie-in valve and 12-meter pipe as being *not only* for the tie-in value and 12-metre section of pipe, but for the overall CASS and BUN.

This means that the impact of the CASS and its so-called BUN of pipelines must be considered in relation to RSWS Condamine Alluvium, the SCA and the PAA and PALU for this RPI25/004 application, for this application to be properly assessed under the RPI Act and Regulations.

Arrow's application documents make numerous claims as to what Arrow considers to be the benefit of its CASS. It does not appear to have disclosed that the areas of greatest interest it refers to are based on the OGIA 2019 UWIR rather than the OGIA 2021 UWIR, and there is no reference to what I thought was to be a **key component** of the success of the CASS which was that the substitution would only occur relative to *historical pattern of use* by the irrigator, not the volume of entitlement the irrigator is able to take Condamine alluvium (CA) groundwater.

As an owner of a CA groundwater licence located near planned CSG mining by Arrow Energy, and nowhere near the planned beneficiaries of the CASS some of whom are in the Ranges Bridge – Macalister area north of Dalby, I have no assurance that my access to my groundwater, which in in a SCA, PAA and RSWS area and being used by me for PALU will not be adversely affected by the modelled decline in CA water due to the depletion of the Walloon Coal Measures aquifer by Arrow Energy. I have seen no modelling or information to inform or assure me that my groundwater bore will not be impacted due to the CASS. It is well-known that the CA groundwater in the Macalister area tends to be salty and due to this it has historically not been used or used to its full allocation by the irrigators who I understand have signed up to participate in the CASS BUN. I cannot see how irrigators receiving larger quantities of treated produced water to replace water that they may not otherwise have taken or historically have not taken will protect the security of my CA groundwater entitlement either in near time (10-15 years) or the medium or long term after the Arrow project has been completed and the petroleum leases returned to the State. Enabling a few irrigators to grow more crop for a short time while other irrigators grow less crop for a long time is not in the regional interest.

Assessment of the CASS BUN would require consultation with the Department of Water, groundwater bore-scale independent modelling of the impact of Arrow's CSG mining activities to each CA groundwater bore, evidence that the pattern of substitution is to follow the historical pattern of use, ongoing audit requirements, and also other information . No scientific evidence has been provided by Arrow in its application documents to support claims in its application documents that the CASS will be of benefit to the CA and individual groundwater users of the CA in the short, medium or long term.

2. Arrow's application documents maintain that Arrow properly consults with neighbours and that it practices area wide planning. However, I own land parcel [redacted] which adjoins land parcel 26DY771 which Arrow says in its application is part of the "The Ten" property – the subject of the RIDA application. Arrow says it has consulted with neighbours as to its application. I have not been notified, or consulted, by Arrow on its tie-in valve or 12-metre pipe. I am not aware of Arrow's area wide planning of activities as Arrow to my recollection since 2020 have never provided me with those details. Over the years Arrow has multiple times built infrastructure and dug wells on land neighbouring mine and the first I have known about it was when I saw

equipment doing the work.

My location is to the [redacted], and I grow irrigated and dryland crops (PALU) and am located on SCA and PAA, yet Arrow repeatedly in its application references neighbours to the south and east, omitting any reference to me.

I discovered Arrow has plans to dig eight or so more CSG production wells and install gathering pipelines within metres of the boundary of my farm and another farm that I own, when Arrow told me they would be starting their construction soon. I requested that Arrow provide me with evidence as to how the wells complied with the requirement of the RPI Act to not impact my land or business, other landowners, or the region, but Arrow refused to provide me with this maintaining it satisfied the exemption conditions of section 22 of the Act. The construction did not go ahead at that time and has not yet but could start at any moment.

If Arrow did proceed with the digging of wells and the gathering pipelines it would be an unlawful action under section 22 of the RPI Act because the wells will draw gas and water from the reservoir in my freehold land and Arrow does not have my agreement to do that resource activity to my land so cannot use the section 22 exemption and must apply for RIDA to dig the wells and pipelines. Also the extraction of gas and produced water will cause my almost flat land to subsidence, significantly impacting my PALU and SCA land.

I was completely unaware that Arrow had any plans to the dig wells, or that my neighbours were making compensation contracts with Arrow for the digging of the wells and pipelines, and I was not consulted at all in their planning for the wells or gathering pipelines.

I suspect but do not know that a CASS BUN pipeline may be going to be dug and laid within metres of the boundary of my land.

3. Arrow has made many claims in its application documents that other owners of land and the regional interest will not be adversely affected by its Surat Gas Project and its CASS.

    a. Please refer to Attachment 1 of this submission as to unlawful activities by Arrow Energy. Unlawful activities cannot be said to be of benefit to a region, retrospectively, currently, or in future times. I can substantiate the statements I have made in Attachment 1, I have lots of Right to Information Releases.

    b. Please refer to Attachment 2 of this submission as to the current and future liability of the State in relation to reduction in water entitlement for holders, arising from subsidence caused by Arrow's Surat Gas CSG mining project. This cannot be said to be of benefit to landowners, water entitlement holders, the community, the region, or the State.

    c. Please refer to Attachment 3 of this submission as this Queensland Treasury analysis CSG-induced subsidence provides information on some of the potential impacts to landowners of subsidence, these directly relate to PALU and the regional interest.

4. Figure 5 of Appendix J of Arrow's application documents, shows a map of RIDA 3RP77715 'overland flow uncontrolled' however the map omits flow velocity vectors so the reader has no idea of which direction the water flows in or its speed, making it impossible to consider the validity of Arrow's claims as to impacts on overland flow. Please refer to Attachment 1 for more information on overland and surface water flow.

5. Insufficient information has been provided in the application documents in relation to what the decommissioning and restoration of the tie-in valve and 12-metre pipe may be. Whilst Arrow refers to codes of practice and environmental authorities, there is no surety that these requirements will be suitable for either SCA or ability to maintain PALU.

    Codes and environmental authority requirements are able to be changed over time by those that administer them. Decommissioning and restoration practices now, if suitable, could be changed to the detriment of the regional interest by regulators to which the regional interest, SCA, PAA, PALU are irrelevant, and not required to be considered.

My understating is the code and the environmental authorities currently do not require the removal of a pipe, and mostly, filling of the pipe with water is sufficient. All materials degrade over time, and by nature the expansion and contraction of the soil will over decades, or longer, cause the pipes to split resulting in the water filling them to escape, causing them to become a PALU hazard, an erosion hazard, and potentially radically directing overland water to new flow paths. Any of these impacts would result in an impact to PALU and SCA beyond that envisaged by the RPI Act.

The self-mulching nature of vertosols is likely to raise the decommissioned pipeline to the surface over time. There is no register in Queensland of where decommissioned pipelines are located and their ownership does not revert to the State when the petroleum lease is surrendered, so the State does not have to rehabilitate pipelines should they become a problem. Arrow or any subsequent owner of the tie-in valve and pipe may be located in a foreign nation, effectively making it impossible for the landowner to seek remediation.

A RIDA which includes pipelines and associated components **must** properly provision for decommissioning in a manner that is suitable for SCA and ongoing PALU of PAA, not simply rely on compliance with a standard, code or environmental authority which may be unsuitable or become unsuitable over time.

6. Arrow has claimed that its CSG mining development will assist to reduce the gas shortage but does not clarify that will be for the benefit of foreigners even though it admits this later in its application documents by saying that the methane gas has been committed for sale for export by other companies.

7. Arrow has claimed that its project upgrades roads for the benefit of the community, but omits to clarify that the roads would not need upgrading but for their use as haul roads by Arrow in conducting its mining.

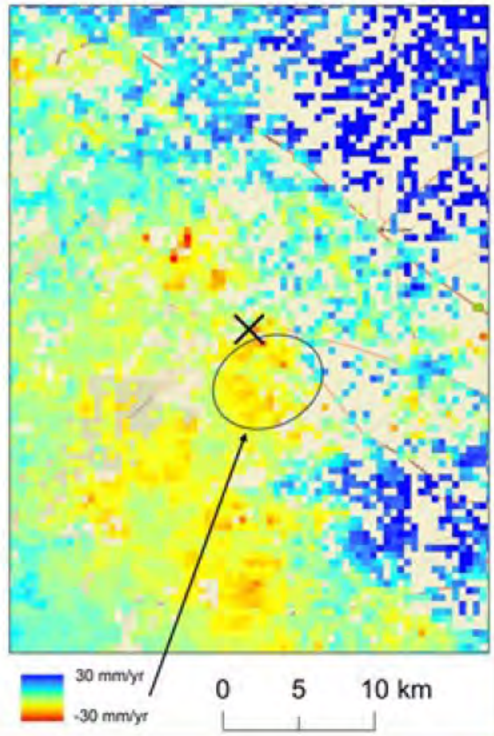
   Arrow does not mention that for roads which remain as gravel, the gravel blows across growing crops adjacent to the road in vastly increased volume due to Arrow traffic, causing significant crop yield loss along the side of paddocks adjacent to roads. This happened to our crops when Arrow increased its activity in PL230 and PL252.

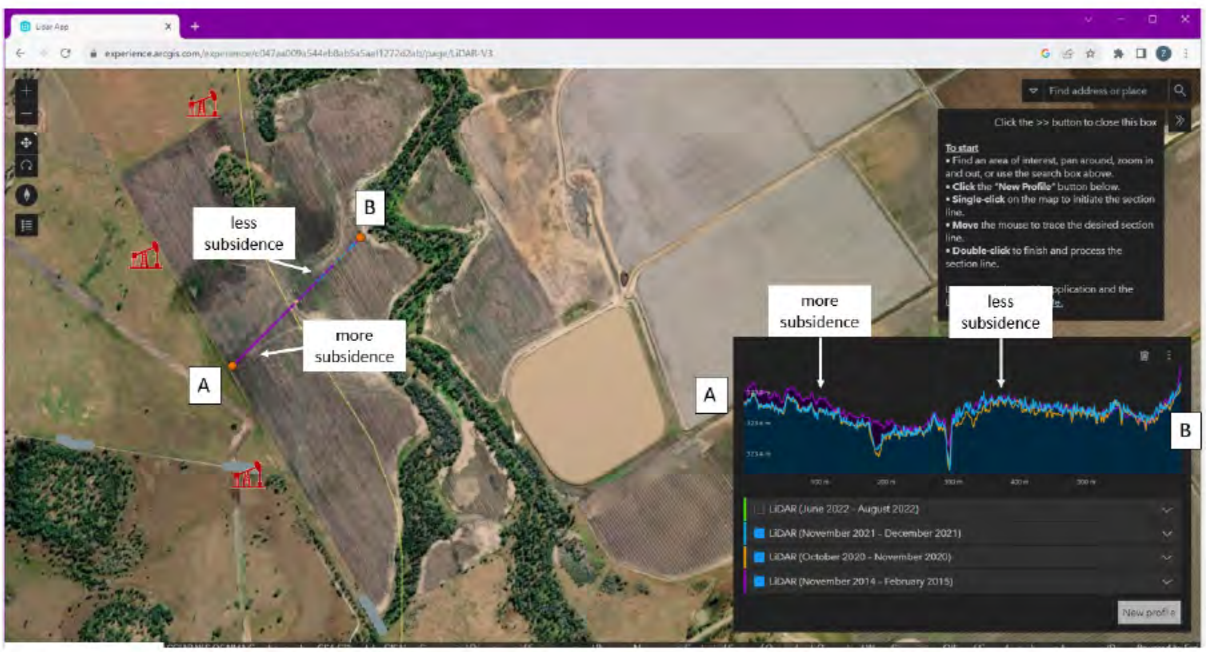
   Arrow also does not mention that for roads which are changed to sealed surfaces, it will be left to the local government and the State to fund the higher cost of maintaining a sealed road, after the Arrow CSG mining has ended. I do not see this as a benefit.
8. Arrow claims in its application documents that it supports local landholders compensating them for the use of their land. Arrow is using my land for five directional CSG production wells it secretly and unlawfully dug into my land without notice from surface pads on neighbouring land. I have not received any compensation for this, yet I have significant losses and costs from the subsidence their CSG mining has caused to my land.

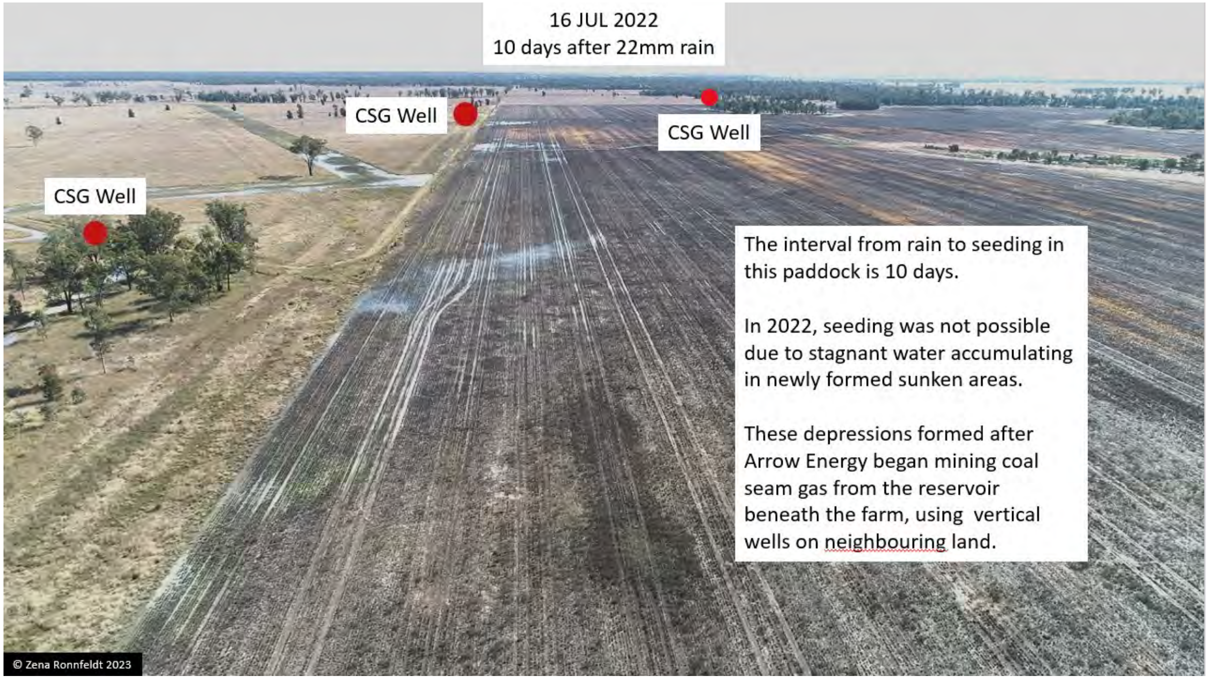
Subsidence caused by CSG mining

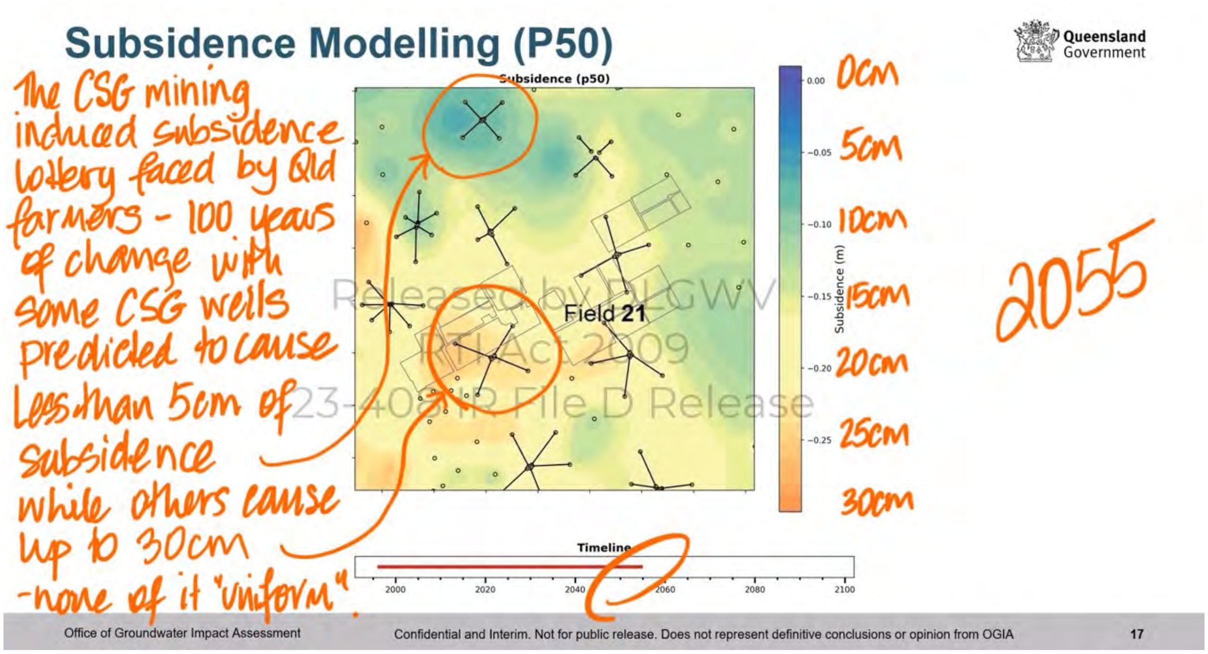
In 2022 a Geoscience Australia report concluded that between 2014 and 2021, [redacted] farm sank unevenly – some areas of it a lot, and other areas not at all

Record 2022/029 | eCat146986 Australian Government, *InSAR processing over the Great Artesian Basin and analysis over the western Eromanga Basin and northern Surat Basin*









I respectfully submit that this RIDA application by Arrow Energy be refused.

Sincerely,

[redacted]

[redacted]

Attachment 1

CSG mining induced subsidence: a landowner perspective by [redacted]
Property Rights Australia 2025 Conference 7th August 2025 speech

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I am a farmer, not a lawyer, this discussion paper is based on my experiences and views - it is not legal advice. If you're dealing with similar issues, I strongly encourage you to seek legal advice tailored to your situation.

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Our farms in the Dalby floodplains benefit from fertile soil, a favourable climate, reliable irrigation, and proximity to transport hubs. These ideal conditions support intensive cropping, optimizing land use, rotation, and input management for sustainable, high-yield production with minimal water use and environmental impact. Most farms in my area are held under freehold land tenure.

The area is an important agricultural resource identified as vital to Queensland through statutory planning instruments. As said by State Planning Policy for agriculture, "*Queensland's agricultural resources are of state and national importance and should be protected from incompatible uses and irreversible impacts that would compromise existing or potential productivity. With sound management, these resources can support agricultural production in perpetuity. However, these resources are finite and are not easily restored once removed, disturbed or degraded*."

This policy to protect and preserve agricultural land is more rigorous than the State planning policy for mining and extractive resources, which only aims to safeguard key extractive resources from potentially incompatible future land uses.

The Regional Planning Interests Act 2014 manages the impact of resource activities and supports their co-existence in areas of regional interest, including key agricultural regions like our farm. Under this act, much of our area is zoned as a strategic cropping area and a priority agricultural area used for priority agricultural land use.

Less than 3% of Queensland is zoned as a Priority Agricultural Area - a small but critical portion of land identified as essential for our economy and future generations. Priority agricultural areas are protected by legislation to ensure their continued viability for agricultural production for current and future generations.

Parts of Shell and PetroChina subsidiary Arrow Energy's Dalby Expansion and Surat Gas coal seam gas mining projects lie within priority agricultural and strategic cropping zones. Our farm, near Arrow's Dalby Expansion Project and within Arrow's Surat Gas Project area, is directly impacted by this mining.

Arrow began mining gas west of our farm in 2007. By 2014, gas wells had reached our western boundary, and by 2020, our farm was fully surrounded. The mining uses vertical and directional wells to extract methane gas from underground coal seams, a method classified as unconventional gas mining, alongside shale and tight gas extraction.

After lodging a complaint with the Queensland Government in 2021, I discovered that Arrow Energy was legally required to notify us if its directional wells were to enter our land—yet we had not received any such notification. Arrow's plan of operations, submitted to the state Environment Department, said that the wells on our boundary were to be vertical and therefore confined to neighbouring land. After they had been dug, Arrow confidentially logged them with the state Resources Department as directional wells entering my farm from neighbouring land.

Following this revelation, Arrow Energy was forced to publicly disclose that prior to 2021, it had secretly dug 48 unlawful directional wells into the properties of 13 landowners from surface pads on neighbouring land. This included five wells dug into our farm in 2018 and 2019.

I was astounded that despite modern data-matching capabilities, Government had no system in place to ensure information reported to its Environment Department by CSG miners was accurately cross-checked with records logged by its Resources Department and the Office of Groundwater Impact Assessment. There was no mechanism to monitor whether private landowners were being properly notified about gas wells on their land.

An additional 12 directional and vertical CSG wells, progressively put into mining production between 2015 and 2020, are within meters of my boundary. These neighbouring wells, along with others in my area have caused subsidence issues on our farm, disrupting drainage patterns, reducing crop yields, preventing us from growing crops in some years, and causing water to accumulate in sunken areas.

Arrow Energy has acknowledged that our farm is subsiding due to their mining activities, yet they continue to deny that the subsidence is causing any impact on our land or us.

For failing to comply with private land access notice requirements, the Department of Resources fined Arrow Energy one million dollars—equating to just $28,333 per unlawful directional well. The department ignored potential impacts on the land, farming businesses, and individuals. Instead of requiring Arrow to make amends and compensate landholders like me, the government kept the entire fine, with none allocated to farm restitution or subsidence research.

This inaction highlights a systemic failure—the regulator penalized Arrow Energy, requiring it to pay the government, which was already receiving royalties. Despite being fined, Arrow simply continued its mining operations and royalty payments to

Government, while landowners received nothing and were left to bear the full financial and operational burden.

Incredibly, in a society that claims to uphold democracy and social license for the unconventional gas industry, landowners like me must fight for basic protections while a multinational coal seam gas miner, having trespassed on private land, operates with impunity.

This situation illustrates the wider failures in regulation, oversight, accountability, and transparency within Queensland's and Australia's governance of the unconventional gas mining industry.

In early 2020, we noticed sunken areas had begun to form in our western paddock, disrupting surface water drainage and farming operations. Given the farm’s stable soil type, the area's geological stability, and the absence of groundwater irrigation, melting permafrost, or decaying peat bogs, CSG mining remains the only plausible cause.

Mining methane gas from coal seams involves extracting salty, contaminated water, reducing pressure, and allowing gas to escape. This causes the coal to shrink and compact, leading to surface subsidence.

The lenticular coal seams in my area are irregular, discontinuous, and vary in thickness and connectivity. These lens-shaped coal deposits tend to be short, fragmented and contain methane at inconsistent concentrations, creating unpredictable extraction patterns that increase localized subsidence risks. Coal deposits often taper off entirely, preventing uniform gas removal and intensifying uneven ground movement.

In the Surat Basin, significant groundwater extraction by gas miners accelerates this process. The coal in this region is notably wet compared to other areas, which affects gas desorption and extraction dynamics. Thin, short, uneven seams at varying depths make subsidence difficult to predict and model, leading to differential ground movement that continues to develop on our farm. Subsidence also fractures underground strata permanently, triggering micro-seismic events and threatening irrigation dams, drainage systems, and aquifers.

Recent preliminary modelling by the Office of Groundwater Impact Assessment, known as the OGIA, obtained through Right to Information, indicates that both the occurrence and extent of subsidence are highly unpredictable—much like a lottery, where outcomes vary significantly and lack certainty.

My area is a heavily cultivated floodplain with a low slope, where even minor landform changes can disrupt cropping, water flow patterns, access to surface and overland irrigation, drainage, soil health, and land productivity. This makes it highly vulnerable to subsidence impacts.

The OGIA in its 2021 underground water impact report for the surat cumulative management area, known as the 2021 UWIR, found that a single CSG production well causes depressurisation for up to 10km away from the well.

In my experience I have found the state and commonwealth government departments responsible for administering environmental protection, petroleum and gas, land access, water, and planning laws struggle with a fragmented and inconsistent approach in relation to the unconventional gas mining industry.

I found each department mostly operates within its own silo, often failing to understand the full scope and intent of the laws they enforce. There is little meaningful coordination between them, leading to contradictory interpretations, bureaucratic inefficiencies, and regulatory gaps that leave impacted landowners like me without effective recourse.

In its former role as the Gasfields Commission Queensland, Coexistence Queensland was meant to facilitate dialogue between landholders, government, and the resource sector. However, my experience has been that rather than ensuring strong protections for agricultural land, its function seemed to be promoting unconventional gas industry-led "coexistence" narratives that failed to reflect the real experiences of adversely affected landowners.

Instead of providing meaningful solutions, the disjointed administration of the myriads of laws regulating CSG mining and its waste has resulted in either poor outcomes—or worse, complete non-outcomes—for those directly impacted by subsidence.

I found that while I seek clarity and assistance I am caught in a cycle of miscommunication, with departments passing responsibility rather than working together to enforce current laws and deliver cohesive, enforceable protections for emerging problems. This systemic failure undermines confidence in regulatory oversight and allows miners to proceed largely unchecked, at the expense of those like me who rely on the land for their livelihoods.

Beyond my own farm, this raises serious questions about landholder rights, agricultural sustainability, and the integrity of land-use decisions. My experience is a stark reminder that without proper unconventional gas mining industry regulation, oversight, enforcement, accountability, and transparency, farming families will continue to bear the real costs of CSG mining from their own personal income, assets and superannuation —costs that are seemingly ignored by policymakers and the mining industry.

It has now been exposed that more than a decade ago both the Government and the mining industry acknowledged that CSG extraction can lead to subsidence. Since then, little effort has been made to research, measure, or monitor its impact—particularly on cropping land. No long-term data has been collected at a scale relevant to intensive cropping.

Farmers are now facing a major issue: there is no established scientific framework to demonstrate subsidence at a resolution accurate enough to confirm impact at a cropped paddock scale, nor a clear legislative process for seeking compensation. With Arrow Energy overseeing data collection and owning the data collected, there has been no incentive to gather evidence that could confirm its responsibility to affected landowners.

This lack of scientific oversight has enabled the Government to allow the mining industry to continue mining unhindered, putting important cropping land at risk, altering overland water flow on my farm, and risking permanent change to flood patterns.

Like many other farmers, we didn't collect our own measurement data over the years, having been assured that subsidence wouldn't pose a problem to our land or operations.

One of my biggest concerns is subsidence monitoring.

InSAR (Interferometric Synthetic Aperture Radar) from satellite can detect ground movement but is unsuitable in cultivated areas like my farm. Crops and dense vegetation scatter radar signals, causing inconsistent measurements as plants grow, move, or are harvested. Frequent soil disturbances—from ploughing, irrigation, and planting—further mask actual subsidence. Since InSAR relies on comparing satellite images over time, the rapid landscape changes in cropped areas lead to data loss, making it ineffective for tracking subsidence.

Arrow Energy has used aerial laser surveys – LiDAR – to assess ground movement. Arrow Energy's regional LiDAR is unsuitable for paddock-scale subsidence monitoring.

- It captures surface elevation but cannot differentiate between standing water, crops, and actual ground movement, leading to underreporting.
- Aerial scanning lacks ground-truthing, so it ignores soil conditions, crop growth, and visible farmer-observed changes.
- Its resolution is too low to detect subtle terrain variations, allowing Arrow Energy to dismiss significant landholder-reported impacts.
- Accuracy is based on a 67% certainty level for unobstructed surfaces, but vegetation and terrain variations reduce precision on cropping land.

Arrow Energy controls data collection with no independent verification, allowing it to downplay land damage. In my experience, its reliance on LiDAR conceals subsidence impacts.

Right to Information revealed that the OGIA endorsed Arrow Energy's LiDAR data without proper scientific investigation, prioritising minimising the cost to Arrow of monitoring subsidence. The data is too broad to accurately reflect cropping land impacts, and neither the OGIA nor the Government can assure its usefulness for landowners seeking compensation.

On our farm—the first to publicly report subsidence impacts—the available data lacks the accuracy needed to reliably identify how subsidence affects cropping operations.

Right to Information requests revealed that in 2022 the OGIA had wrongly labelled me and other landowners whose farms are subsiding, as ideologically opposed, raising serious, legitimate questions about bias and scientific repression.

Instead of recognizing landholders as legitimate stakeholders, our concerns were dismissed or diminished based on preconceived narratives that favoured gas mining industry interests over objective governance.

Public servants are expected to act fairly, transparently, and impartially, yet retaliatory comments worked to discredit farmers experiencing actual subsidence from gas mining. The OGIA 2021 UWIR subsidence model, exposed through RTI, relied on broad averages, making it incapable of predicting the real subsidence affecting farms.

Right to Information also revealed that within Government, in 2023 the Executive Director of the OGIA, Mr Sanjeev Pandey, accused landowners including me of weaponizing the OGIA subsidence model to create angst, simply it seems because at a meeting none of us landowners produced a scientific measurement which proved subsidence had occurred to and already impacted our farms. I was also accused of making personal accusations against him, simply because I and other landowners raised valid concerns about the limitations of the OGIA model, particularly its inability to accurately predict subsidence at the paddock scale, as I had exposed this through right to information.

I was shouted down by Mr Pandey when pointing out issues with InSAR pixel size, I thought he seemed reluctant to acknowledge shortcoming in his modelling approach. My concerns were dismissed rather than addressed, and the session was concluded abruptly after I used the pre-release version of the OGIA LiDAR elevation profile tool which uses Arrow Energy's data, to show that on a broad scale subsidence had actually occurred to my paddock in the area where photos and video I had shared on social media showed ponded water trapped in subsidence depressions.

This example reflects what I believe to be a broader culture of hostility within the OGIA toward landowners whose farms are subsiding and being impacted by subsidence caused by CSG mining. Despite being an independent entity, the OGIA lacks proper governance, oversight, accountability, and transparency, operating under a shroud of secrecy and under a single individual's control.

The Resources Department demonstrated lack of enforcement by failing to uphold the legal requirement for a Conduct and Compensation Agreement (known as a CCA) between landholders and gas companies where mining activities have more than a minor impact on the land or landholders' business. Instead of ensuring miners comply with the law, the department tells landholders to take the matter to court—a process that is time-consuming, costly, and inaccessible for most. This deliberate abdication of responsibility means that landholders are left to fend for themselves in legal battles against large, well-resourced corporations.

Rather than acting as a fair regulator, the department has effectively created an environment where miners can operate as their own regulator and without meaningful accountability.

Coal seam gas mining-induced subsidence potentially falls under many Queensland and Commonwealth laws, yet despite their existence, in my experience regulatory enforcement remains weak or non-existent, leaving intensive cropping without effective protection.

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

- is meant to provide environmental protections for matters of national environmental significance, in simple terms for CSG mining, this is flora, fauna and water resources.

- Arrow Energy's mining activities in my area are the EPBC 2010/5343 Dalby Expansion Project, a non-controlled action if undertaken in a particular manner, and the EPBC 2010/5344 Surat Gas Project which is an environmental approval with conditions. In practice, I discovered the conditions for these projects do nothing to protect agriculture nor do they require the keeping of information necessary to establish whether Arrow's gas mining has impacted the agricultural use of land and surface water in cultivated areas or at a cropping farm scale.

- Information I found through Cth. Freedom of Information processes and online, supports a conclusion that Arrow Energy began its Surat Gas Project before satisfying mandatory regulatory requirements, failing to notify authorities as required and proceeding without mandated subsidence monitoring and environmental protection measures in place. Instead of holding Arrow accountable for these failures when I shared them with the Cth. *Department of Climate Change, Energy, the Environment and Water* (**DCCEEW**) and publicly on social media, the former Cth. Environment Minister Tanya Plibersek early in 2025 allowed the retroactive alteration of the Surat Gas Project conditions, effectively legalizing Arrow's unlawful activities after the fact.

The Qld Environmental Protection Act 1994 (EP Act)

- regulates environmental impacts from mining, but impact to agricultural use of land from subsidence caused by CSG mining is not explicitly recognized as environmental harm under its provisions.

- I was told by the former *Department of Environment and Science* (**DES**) that the department as regulator holds the position that environmental harm, under the EP Act, does not apply to the agricultural use of land. This provides no assistance in addressing mining-related subsidence impacts on farming operations.

The Qld Water Act 2000 (Water Act)

- governs underground water, surface water and overland water management, which is critical since CSG mining removes water from coal seams, leading to subsidence and altered water movement.

- Despite my area's location within the Murray-Darling Basin—where licensed irrigation surface water could be reduced if environmental flows decline from subsidence caused by CSG mining, the OGIA in its 2021 UWIR, did not comprehensively model water flow changes. A significant omission given the potential for disruption to surface and overland water from subsidence.

- To my knowledge, there is no monitoring by the *Department of Local Government, Water & Volunteers,* under the Water Act, of changes to surface and overland water flows caused by CSG mining-induced subsidence. This suggests that the Government is either failing to recognize subsidence as a surface water impact requiring intervention or is deliberately obscuring the issue in the hope of reducing risk of Queensland's irrigation water entitlement under the Murray-Darling Basin Plan being reduced due to gas mining subsidence.

- Although the OGIA is responsible for evaluating cumulative groundwater impacts from CSG mining, its role in subsidence monitoring remains limited to modelling regional subsidence and a small-scale project focused on two farms, where subsidence is being modelled at a finer scale. Notably, the small-scale project has been underway for two years but has still not passed the technical review process, raising concerns about the scientific rigor and procedural approach of the OGIA.

- CSG miners benefit from a statutory right to take associated water along with methane gas, allowing them to extract groundwater without needing a separate water license. Long-term cumulative impacts are ignored, as there is no direct requirement for these miners to offset or remediate groundwater depletion caused by their activities.

- While "make good" groundwater obligations require CSG miners to compensate bore owners if their water bores are impaired due to mining activities, these provisions are reactive not preventative and do not relate to subsidence.

- There is no cumulative management area designated for subsidence, leaving landowners to try to seek compensation from multiple resource authority holders who cumulatively are causing the land to subside. There appears to be no statutory right to compensation for cumulative subsidence caused by miners outside the specific tenure where the landowner is experiencing subsidence impacts. Landowners are legally forced to allow CSG mining and endure its impacts, whether or not mining infrastructure is present on their land. Yet, due to state Government policies, landowners may have no statutory right to compensation for cumulative impacts from CSG mining done in neighbouring and nearby tenures.

- Ultimately, the subsidence model of the OGIA is *only a model*. It relies on assumptions, historical data, broad averages and predictive algorithms to estimate terrain and water flow changes. While modelling, if done at a fit for purpose scale, may be a valuable tool for understanding potential impacts, it can never replace actual monitoring and measurement. Without continuous, on-the-ground monitoring, uncertainties will remain about the full extent of groundwater and surface water disruptions from CSG mining activities.

The Qld Planning Act 2016 Statutory Planning Instruments,

- being State Planning Policy and regional plans, guide land use decisions by seeking to balance CSG mining development and agricultural sustainability.
- I have found that the Planning Department, as a public service, has failed to enforce the *Regional Planning Interests Act 2014* (**RPI Act**) to support these state planning instruments, effectively allowing a multinational CSG miner to circumvent law enacted democratically. This has enabled the subversion of the State Interest in Agriculture, and the Darling Downs Regional Plan, prioritizing resource sector interests over the protection of farming operations. This failure reflects a broader issue where public servants—tasked with upholding legislative integrity—are instead facilitating the erosion of legal protections through non-enforcement.

Even though Arrow Energy has claimed that the five CSG production wells it dug secretly into my farm are exempt under section 24 of the RPI Act, they are instead unlawful as they do not meet required criteria because:

- The *Strategic Cropping Land Act 2011* (**SCL Act**) was in force before the RPI Act commenced.
- Arrow amended its *Environmental Authority* (**EA**) after the SCL Act commenced, which triggered the requirement to comply with the SCL Act.
- The number of production wells Arrow's EA authorised before the commencement of the SCL in *Petroleum Lease 230* (**PL230**) where my farm is located were all dug and in production prior to the commencement of the RPI Act in 2014

    - The five production wells dug into my farm are in a *Strategic Cropping Land* (**SCL**) Map Area under the SCL Act, and a *Strategic Cropping Area* (**SCA**), and *Priority Agricultural Area* (**PAA**), under the RPI Act.

    - Arrow did not obtain a SCL Protection Decision or a SCL Compliance Certificate, either of which were necessary to be able to dig more wells in PL230 in a SCL area, had those wells been dug prior to the commencement of the RPI Act.

    - Because the wells were not authorised by a SCL compliance certificate or SCL protection decision the SCL Act prevented the EP Act from giving environmental authority for the wells

    - Without these approvals, Arrow could not have lawfully dug or operated the five wells on my farm **before** the RPI Act commenced, therefore it could not dig or operate them **after** the RPI Act commenced in the absence of my agreement or a Regional Interest Development Approval, a RIDA, granted by Government under the RPI Act

- The five wells secretly dug into my farm by Arrow Energy are an example of public servants in the D*epartment of State Development, Infrastructure and Planning* (**DSDIP**) failing to act against corporate self-regulation, even where clear unlawful actions exist. Despite over *two years* of investigation, the department has been *unable to justify Arrow's legality*. In doing this, the regulator has effectively enabled a multinational entity, ultimately owned by foreign shareholders and the Chinese government, to become the regulator, undermining statutory safeguards, creating an unlawful agenda in practice, all despite the legal framework being in place.

- Queensland's planning framework has failed to effectively protect legislatively safeguarded agricultural land from the long-term impacts of CSG mining.

- This has sent a troubling message to the international mining industry—that compliance with law is optional rather than strictly enforced, leaving areas supposedly protected from long-term mining damage open for business. To the agricultural industry and its financiers, the message is clear: their investments are no longer secure, and they may need to consider asset divestment.

- This failure in enforcement also means farmers like me must fight for recognition, recourse, and compensation, rather than having a system that proactively defends rural land use.

The Qld Petroleum and Gas (Production and Safety) Act 2004 (known as the P&G Act)

- regulates such things as mining activity, landholder rights, miner rights, and safety requirements for petroleum and gas mining.
- Section 804 provides that mining activities must not unreasonably interfere with existing land use. I thought this provision was meant to protect landholders like me from disruptions caused by CSG mining. However, I have found departmental enforcement has been non-existent, allowing CSG miners to proceed with activities that directly impact farming operations unchecked.

The Mineral and Energy Resources (Common Provisions) Act 2016 (MERCP Act)

- sets out general land access laws for CSG miners, including requirements for notification, access and compensation.
- Despite requiring Compensation Agreements for resource activities having more than a minor impact on the land or landholder's business, Arrow Energy has been allowed to self-regulate and in my experience refuses to enter into these agreements for landholders with directional wells but no surface infrastructure, leaving affected landholders without negotiated compensation.
- Instead of requiring compensation for directional wells, Right to Information disclosed that one of the focuses of the Resources Department was ensuring that landholders could not claim compensation up-front

The LNP state Government, under Deputy Premier Jarrod Bleijie, must urgently and fairly address the unresolved failures within the Regional Planning Interests (RPI) division of his planning department. These failures, originating under Steven Miles MP of the previous Labour government, have left landowners unprotected against subsidence impacts caused by Arrow Energy's CSG mining activities.

The Petroleum and Gas (Production and Safety) Act (**P&G Act**) simply speaking defines CSG and its associated water extraction as occurring from the reservoir in which it is contained, rather than from the individual land parcels where CSG wells are located.

The government has said that under Section 81 of the MERCP Act, landowners are entitled to compensation for subsidence caused by *resource activities*. For CSG mining, these resource activities are defined by the P&G Act.

Under the P&G Act, the *resource activity* refers to the extraction of CSG and its associated water from the underground *reservoir* where it is contained to produce the gas, rather than the presence of CSG wells on the land itself.

For the purposes of the RPI Act, *resource activities* are defined by the *same provisions* in the P&G Act.

The Qld Government must acknowledge that the P&G Act's definition of resource activity applies consistently across the MERCP Act and the RPI Act.

Government failure to enforce this under the RPI Act—despite that Act sourcing the definition from the same provisions of the P&G Act as the MERCP Act—has led to a serious denial of natural justice for subsidence-affected and at-risk landowners like me in areas of regional interest.

Arrow Energy has proceeded with the development of approximately 180 CSG production wells in my area without obtaining Regional Interest Development Approval (RIDA) or securing agreements with all landholders affected by or predicted to be affected by subsidence caused by its production of CSG.

The company has argued that its operations fall under section 22 of the RPI Act, which provides an exemption when an agreement is reached with landholders and conditions relating to impacts are met. However, since Arrow has failed to establish the necessary agreements with all landowners for all CSG wells within the impact radius of each CSG well, I understand that Arrow's claim of exemption under section 22 is invalid. Meaning the wells are all unlawful.

The OGIA 2021 UWIR confirms a single CSG well can cause depressurisation up to 10km away, and that depressurization causes subsidence[i].

The GFCQ 'regulatory review of CSG-induced subsidence discussion paper' and 'final report' confirmed landowners need not have mining infrastructure on their land to claim compensation.

Statements by the Department of Resources and Treasury[ii] reinforce that the right to compensation for subsidence caused by CSG extraction does not require mining infrastructure to be on the land.

Arrow Energy's commitments to Surat Basin landholders, acknowledge compensation rights without CSG mining infrastructure being on the land[iii]

Since Arrow Energy has apparently not met the agreement requirements outlined in subsection 2 of section 22 of the RPI Act, further conditions relating to impacts to other owners of land, or likely impacts to the region, are not **able** to be considered because all conditions for exemption are automatically invalid where there is no agreement. This would mean that:

- the 180 or so CSG production wells—including the five secretly dug into my privately owned land — require regional interest development approval or need to be plugged and abandoned,

- Arrow must be prevented by the chief executive of the RPI Act from digging any more wells until it has obtained RIDA to produce CSG from the impact area of the wells or secured the agreement of every relevant landholder, and

- Subsidence impacts where subsidence has already occurred must be fairly addressed, mitigated and compensated for.

The Government has an obligation to correct these serious regulatory failings because it is responsible for enforcing the RPI Act and ensuring compliance with its provisions. If Arrow Energy has not met the agreement requirements under subsection 2 of section 22, then the exemption is invalid, meaning regulatory enforcement should apply.

The government has a duty to protect landholders' rights and human rights, uphold agricultural safeguards, and ensure fair compensation for impacts like CSG mining induced subsidence. Yet it is clear to me that there has been a disgraceful failure by Government leaving landowners vulnerable to unmitigated subsidence damage.

The government must act now to rectify these injustices, ensuring that Arrow Energy is held accountable for any unauthorized and unlawful coal seam gas mining including that impacting my land and my region.

My experience with commonwealth and state Government, including the OGIA and Coexistence Queensland, has reinforced my belief that policy change is urgently needed. Without meaningful communication and consultation, proper governance, true accountability, genuine oversight, real transparency, and suitable regulatory enforcement, more farming families will continue to bear the real costs of unconventional gas mining resource development—costs repeatedly overlooked by policy developers and decision-makers who lack both the qualifications and understanding of agricultural land use realities.

Subsidence caused by CSG mining disrupts irrigation and cropping, creating costly challenges for farmers.

Despite legislative protections, weak and non-existent enforcement has allowed CSG miners—particularly Arrow Energy—to self-regulate or seemingly even act as the regulator, leading to inadequate monitoring, avoidance of compensation agreements, unlawful mining, and biased assessments that obscure damage to agricultural land.

Government inaction has forced landowners to fight for compensation while bearing the financial burden of mining impacts. Without comprehensive reform, property rights remain at risk.

Landowners must demand government action to safeguard their land and their livelihoods.

[i] OGIA 2021 Underground water impact report for surat cumulative management area, chapter 7
[ii] Qld Treasury – Department of Resources Summary Impact Analysis Statement (IAS) for CSG-induced subsidence management framework 28 March 2024, page 2
[iii] Arrow Energy website

[redacted]

From: [redacted]
Sent: Monday, 9 June 2025 7:33 AM
To: 'LGWV'
Cc: 'Callide Electorate Office'; 'Resources'; '[redacted]'; '[redacted]'
Subject: RE: Meeting 23 May 2025 Murray Darling matters / Arrow CSG mining induced subsidence

Dear Minister Leahy and Assistant Minister Head,

Thank you for the discussion on 23 May 2025 about water matters in relation to coal seam again mining in the Condamine Alluvial floodplain area in the Dalby region.

Further to that discission in relation to the Murray Darling Plan and Queensland's obligations, as I understand it and as pertaining to the Dalby region which is in the Condamine Ballone water management area,

Under the *Water Act 2000*, the *Water Regulation 2016* and the *Water Plan (Condamine Ballone) 2019*, **water access entitlement** for the purpose of compensation means surface water (watercourse) access in the form of a *licence* and overland water access is in the form of an *authorisation*.

Part 3 of Chapter 8 of the *Water Act 2000* and the *Intergovernmental Agreement on a National Water Initiative* provides for **compensation** by the State and Commonwealth should there be a change to a water access entitlement. This includes but is not limited to, the purpose of restoring water to the environment i.e., water flowing from Qld into the Murray-Darling.

Reductions in water access entitlement of 3% or more for *environmental update purposes* must be compensated for. *Environmental update purpose* means the purpose of providing additional water to the environment because of new scientific knowledge demonstrating the amount previously allocated to the environment is inadequate. In my view it is unlikely that water reductions due to subsidence caused by coal seam gas (CSG) mining could be classed as this.

There is an exception to the requirement for to compensate water access entitlement holders but this only applies in the case of a natural decrease in water availability e.g. climate change, drought, bush fires – this is also in the Intergovernmental Agreement (clause 48).

A reduction in water access of entitlement holders which results from subsidence caused by Arrow Energy's mining of CSG cannot be interpreted as a "natural decrease", therefore the State is liable to the water entitlement holder for all surface and overland water lost to them due to Arrow's mining activities. Notably it is the State that is liable under the Water Act 2000, not Arrow Energy. As far as I can see Arrow Energy is not then liable to the State because it is the State which granted Arrow its right to mine – the Petroleum Lease.

The Intergovernmental Agreement also imposes water planning and other obligations on the State to prevent situations such as the changes to surface and overland water which subsidence from Arrow's CSG mining will likely cause. Currently the State is failing to satisfy these obligations in relation to Arrow's CSG mining, should other States complain about Queensland they would be justified in doing so.

The Intergovernmental Agreement on a National Water Initiative may be read here
https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/water/Intergovernmental-Agreement-on-a-national-water-initiative.pdf

With the utmost respect, the State is in my view currently in an era of gross negligence due to

- allowing the Office of Groundwater Impact Assessment to not fulfil its statutory underground water impact reporting requirements in relation to surface and overland water modelling and monitoring, which are imposed on it under the Water Act 2000 and the Environmental Protection Act 1994, and
- failing to implement through its powers under Water Act 2000 and its subordinate legislation, or other legislation, requirements for baseline topographical data and monitoring data of a suitable farm paddock scale (as this is the scale at which water flows on a floodplain) to be in place and being gathered for the Condamine Alluvial floodplain on an ongoing basis prior to and since Arrow Energy's Dalby Expansion and Surat Gas Projects commenced, and
- failing to introduce a CSG mining induced subsidence cumulative management area which also includes impacts to surface and overland water; and
- failing to introduce a CSG mining induced subsidence management and compensation framework; and
- failing to enforce the Regional Planning Interests Act 2014 which should have been and should be able to arrest the development of CSG mining where that mining may cause changes to surface and overland flow of water impacting priority agricultural areas and strategic cropping areas, thus minimising the compensation liability of the State (and future economic losses from the degradation of the agricultural industry due to the subsidence in intensive raingrown and irrigated cropping areas)

I respectfully request your urgent attention to this very large and growing problem.

Sincerely,

[redacted]

[redacted]