

9 June 2023

Email: [IESCsecretariat@dcceew.gov.au](mailto:IESCsecretariat@dcceew.gov.au)

Dear IESC members,

I am pleased to provide you with the GasFields Commission Queensland's (the Commission's) formal response to the draft Information Guidelines Explanatory Note: Subsidence Associated with Coal Seam Gas Production (explanatory note). The Commission welcomes the opportunity to review the explanatory note and provide feedback.

The Commission has a unique role in managing and improving the sustainable coexistence of landholders, regional communities and the onshore gas industry in Queensland. In recent years, the issue of coal seam gas-induced subsidence (CSG-induced subsidence) has emerged as a significant concern for landholders in areas of land used for irrigated and dryland cropping, particularly on southern Queensland's Condamine Floodplain.

The Commission appreciates the effort of the IESC in progressing the field of scientific research on CSG-induced subsidence and assisting the gas industry towards meeting best practice in subsidence monitoring and modelling; and ultimately management of the impacts of CSG-induced subsidence.

The IESC has correctly identified in the explanatory note that the Commission and the Office of Groundwater Impact Assessment (OGIA) have collaborated on the research associated with the impacts and potential consequences to farming operation as a result of CSG-induced subsidence. Therefore, I will defer to OGIA to provide feedback on the technical elements of this explanatory note.

It should be noted that the Commission's feedback is general in nature and focuses on seeking to value add in-terms of readability and useability of the document.

Should you require any additional information or wish to further discuss the Commission's submission, please do not hesitate to contact Caitlin Barraclough on 0484 295 698 alternatively via email to [enquiries@gfcq.org.au](mailto:enquiries@gfcq.org.au).

Yours sincerely

Warwick Squire  
**Chief Executive Officer**  
**GasFields Commission Queensland**

**Encl.**

**General Feedback:**

- The Commission understands that this explanatory note is to be used by practitioners to assist in navigating the tools and methodologies recommended by the IESC. Uptake of the document could be improved by including a brief description of the methodologies and tools described in the explanatory note and their application or the circumstances in which they should be used.
- This could be a ‘methodologies and tools’ summary section, which would highlight to a user upfront which tools and methods would be applicable to their purpose. This could also act as an index of the tools and methodologies and how they interact to enabling users to navigate to the sections that are most applicable to a subsidence scenario .

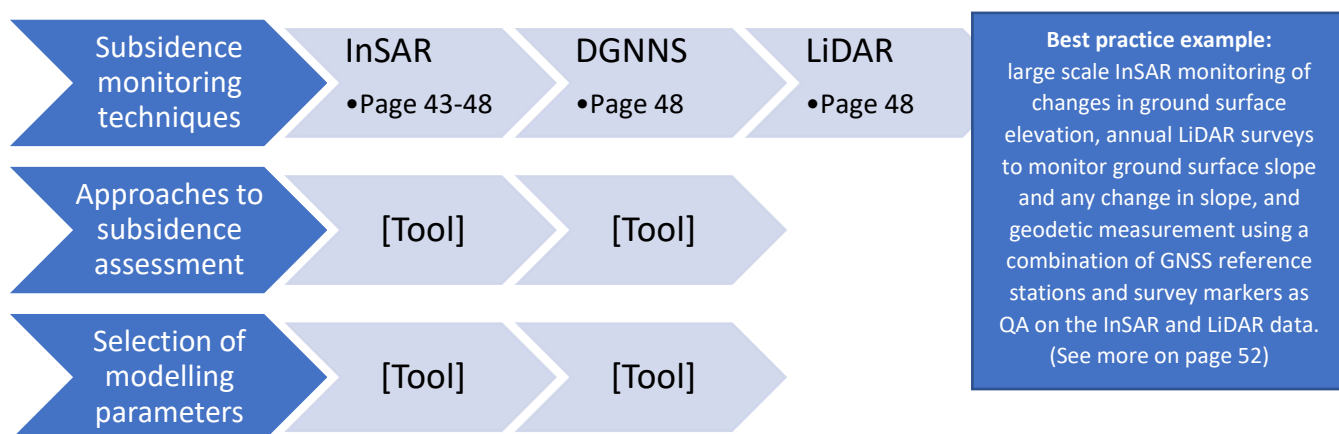


Figure 1 A very rough draft example of how the methodologies and tools described in the document could be visually presented, using the table of contents to construct this example, to increase likelihood of users locating and using the tools and methodologies described in the document.

- The Commission has experienced instances where information and content can be taken out of context which can lead to confusing the issues at hand. Therefore it is suggested that the content of the explanatory note should be framed in scenarios that present the most likely to be experienced in the case for CSG-induced subsidence. For example, in section 5.2 of the explanatory note a comparison is made between other types of subsidence and CSG-induced subsidence. The mere mention of damage to road and infrastructure could easily be taken out of context. The Commission considers it would be more appropriate to open the section with a description of the expected impacts of CSG-induced subsidence, rather than with descriptions of the expected impacts of other types of subsidence that are not associated with CSG production.
- It may be helpful to include as appendices excerpts of documents that are referred to as demonstrating best practice e.g., excerpts of Arrow Energy’s WMMP that are referred to in the explanatory note.

**Specific Comments:**

- **Section 5.2:** Suggest not introducing this section with the most dramatic examples of subsidence impacts, when the section then goes on to state that CSG induced

subsidence is likely to be in an order of magnitude similar to naturally occurring processes.

- **Figure 17:** Suggest providing more context – is this figure intended to show CSG-induced subsidence? If so, how has this been determined? Are there other processes potentially influencing the ground movement in this example? Is this typical of how the IESC expects CSG-induced subsidence to materialise? What is the magnitude of downward movement represented by the dark blue colouration?
- **Figure 18:** is this figure sourced from the paper mentioned (Best et al. 2014)? The figure immediately following on from description of the paper reads as if it comes from the paper, but not sure this is the case.
- **Page 41** – Typo: Is “on” meant to be “in” in the following sentence?  
*“Put another on way, the two key drivers of CSG-induced subsidence vary in space over distances on the order of hundreds of metres, and thus the same could be expected of the associated compaction.”*
- **Section 10.1** – typo: “theses” should be “these”