

To the Independent Planning Commissioners,

I wish to respond to the misinformation in Santos' "final submission". There are so many inaccuracies in their response to the IPC questions, but I believe that one of the worst ones is their claim that "calibrating the groundwater model to Class 2 or 3 confidence, may, at best, take decades to achieve." I believe that this is crucial to the IPC's consideration of the Precautionary Principle, since the argument is that *the impact must be irreversibly inflicted on the groundwater hydrology of the area, before it can be understood*. This is the exact opposite of the Precautionary Principle, to which Australia is a signatory, and which states:

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."
— *Rio Declaration, 1992*

Santos acknowledges that GISERA's groundwater modelling uncertainty analysis, generated a range of water production volumes between 4.4 ggalitres and 107 ggalitres and that at the higher end of water removal, CSIRO estimated 2,299ML per year peak induced flux from the Pilliga Sandstone. They claim that two key parameters informed this higher rate of estimated take: greater proportion of exploitation of the Hoskissons seam than they intend, and greater take of water extraction than the conditions of consent allow. Regarding the Namoi alluvium and Santos' claim that the discrepancy in the volume of flux assumed from the GAB recharge to the Namoi alluvium in the NA model and Santos' model is "insignificant" then if that's the case, why didn't they just use the existing model's figure for this parameter?

I would also like the IPC to ask David Kitto (DPIE) on what grounds he can say that this Narrabri Gas project *doesn't* trigger the Precautionary Principle?? Can he tell us the yardsticks that he used to make this decision? And on what basis would a project trigger the Precautionary Principle, if the Narrabri Gas Project doesn't??

Professor John Williams, one of Australia's most respected scientists, has claimed that the Narrabri CSG project poses too great a risk to the region's water, people, and environment. John Williams is a founding member of the Wentworth Group of Concerned Scientists, which was established in 2002 to campaign for sustainable development and water reform. He is a former head of CSIRO's Land and Water division, a New South Wales Land and Environment Commissioner and is currently an emeritus professor and research associate at the Australian National University.

Dr Williams said not enough was known about fractures and faults in rock formations separating the deep coal seams, from which gas would be extracted, and shallow groundwater aquifers, which are crucial for domestic and agricultural water supplies. He said there was a great risk the aquifers could be contaminated or run dry. "I personally don't think it is worth the risk," Dr Williams said. "I don't think the current analysis is anywhere sufficient [enough] to give you confidence that there is low level of risk."

He said that even the oil and gas company Santos admitted to uncertainties in its

own scientific assessment of the project. "There are many things where the report has been quite honest and says, 'We don't know but we'll proceed and hope it works out,'" he said.

"That's not good enough."

Dr Williams is gravely concerned about the risks of the project. Dr Williams said the New South Wales planning assessment failed to consider the cumulative risks of the project on a whole-of-landscape basis. "I think the risk to our vegetation and habitat, the risk to our agricultural land and the risk to our water resources is such that I don't think we are in a position, in my view, to say there is no risk to any of that," he said.

I have presented (in previous submissions and evidence) that this area (in which the NGP proposes to drill 850 gas wells, for a start) is the most vital recharge area for the southern GAB, the Pilliga Sandstone. I can send dozens of documents again, if needed, to support this claim - by expert scientists, hydrogeologists, groundwater engineers etc - but the fact that these fragile sandstone aquifers could be put at risk, certainly must trigger the Precautionary Principle.

How can David Kitto over-rule all these highly credentialed experts in their field, who all believe (and have provided the evidence) that this project places our groundwater - and all who rely on it – at grave risk of irreversible damage.

I am requesting that the Precautionary Principle be applied, and that this Narrabri Gas project not be approved, until further studies and evidence are produced, to prove categorically that it will cause no harm to our groundwater and aquifers, and the southern recharge of our GAB.

Thank you for listening to my deep concerns,

Yours sincerely,

Anne Kennedy
President Artesian Bore Water Users Assn.
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