

**SUBMISSION ON 'UNDERGROUND WATER IMPACT REPORT
FOR THE SURAT CUMULATIVE MANAGEMENT AREA'**

26 APRIL 2016

Mr Randall Cox
General Manager
Office of Groundwater Impact Assessment
Department of Natural Resources and Mines
PO Box 15216
City East
QLD 4002

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Dear Mr Cox.

The Queensland Farmers Federation extends its gratitude to the Office of Groundwater Impact Assessment for the opportunity to make a submission on the consultation draft Underground Water Impact Report for the Surat Cumulative Management Area, March 2016.

Queensland Farmers' Federation (QFF) is the peak body representing and uniting 17 of Queensland's rural industry organisations who work on behalf of primary producers across the state. QFF's mission is to secure a sustainable future for Queensland primary producers within a favourable social, economic and political environment by representing the common interests of its member organisations. QFF's core business centres on resource security; water resources; environment and natural resources; industry development; economics; quarantine and trade.

Our goal is to secure a sustainable and profitable future for our members, as a core growth sector of the economy. Our members include:

- CANEGROWERS,
- Cotton Australia,
- Growcom,
- Nursery and Garden Industry Queensland,
- Queensland Aquaculture Industries Federation,
- Queensland Chicken Growers Association,
- Queensland Dairyfarmers Organisation,
- Queensland Chicken Meat Council,
- Queensland United Egg Producers,
- Flower Association of Queensland Inc.,
- Pork Queensland Inc.,
- Australian Organic,
- Pioneer Valley Water Co-operative Limited,
- Central Downs Irrigators Limited,

- Burdekin River Irrigators Area Committee,
- Bundaberg Regional Irrigators Group, and
- Fitzroy Basin Food and Fibre.

Over 307,000 people are directly employed in agriculture across Australia, of which over 55,000 are employed in Queensland¹ which is the largest, permanent employer in rural and regional communities. Australia's 135,000 farmers produce enough food to feed 80 million people providing 93% of the domestic food supply, and supports an export market valued at more than AU\$41 billion per annum (over 13% of export revenue)². With population growth and rising personal income, the emerging middle class in Asia provides the major market for over 60% of Australian agricultural exports².

Overview

QFF welcomes the release of the draft Underground Water Impact Report (UWIR) 2016 for the Surat Cumulative Management Area and acknowledges the continued efforts by the Office of Groundwater Impact Assessment (OGIA) to model and report on the ground water impacts associated with the exploration for, and production of, petroleum and gas. QFF recognises the current modifications by OGIA to increase the predictive ability of ground water modelling to assess the regional impacts through the inclusion of the presence of the gas phase near to extraction wells.

QFF notes that OGIA is an independent entity established under the *Water Act 2000* tasked with preparing the cumulative assessments of the impacts of Coal Seam Gas (CSG) water extraction, and the development of integrated regional management arrangements. OGIA also has responsibility for the storage of baseline data and monitoring data collected under monitoring plans that are carried out in accordance with water monitoring strategies in approved UWIRs. As such, QFF recognizes the limitations of the authority of OGIA to make recommendations and provide input into critical water planning mechanisms which directly impact current and future agricultural activities. For example, the development of a new water plan to replace the Water Resource (Great Artesian Basin) Plan 2006 which is due to expire on 1 September 2016 and the apparent omission of modelling to determine the recovery of the GAB; through to the impacts pertaining to free gas in water bores and the impacts of the free gas on the capacity of water bores to supply water.

QFF requests that the findings of Surat UWIR are disseminated by OGIA to other government departments so that they may be used to inform future water use planning and future water allocations.

Limitations

QFF requests that OGIA remove the statement included in the Summary document accompanying the report pertaining to the CSG impact to the Condamine Alluvium. The comparison of the CSG impact as a percentage of 'irrigators take' is misleading and fails to acknowledge that irrigators have an entitlement under a water resource plan, whilst the

¹ Queensland Treasury and the Department of Education and Training, Jobs Queensland Occupational Data, 2016.

² Australian Bureau of Agricultural and Resource Economics and Sciences. (2014). Agricultural Commodity Statistics.

mineral and petroleum industry do not. Secondly irrigators have voluntarily reduced their usage in an effort to correct the over allocation of the water resource and, in some instances, the over-allocated entitlements have been bought-back (using taxpayers money) by the Federal Government.

QFF and its members are particularly concerned that whilst the agricultural industry has adopted long-term strategies for sustainability (including the surrender of water), the CSG industry does not have the same considerations or drivers for sustainable operation.

QFF requests the deletion of all statements making comparison of the CSG water extraction impacts as a percentage of irrigator's entitlements granted under a water resource plan.

QFF notes that the Surat UWIR report makes reference to the contraction of planned CSG developments, including a noted reduction from 2012 projections of the Long-term Affected Areas. As such, the 2016 report models less than 18,000 gas wells (see Figure 2-7 Existing and projected future CSG wells in current and planned production areas). However, Departmental estimates from 2014/early 2015 predicted 30,000-40,000 total wells by 2025, averaging 400-500 new wells per year per company (various sources). It is noted that none of the existing tenures have been surrendered and the area granted for petroleum has remained steady at 31 million hectares³.

QFF is aware that the Queensland Government introduced a new policy for petroleum and gas to allow applications for Potential Commercial Areas⁴. Potential Commercial Areas (PCAs) are effectively a variation on a petroleum production lease but the usual requirement to commence production within two years is waived. For example, PCAs have been applied to fields with high-quality reserves, but which require pipeline and other services to make the recovery of the gas economical.

The large volumes of prospective or contingent petroleum/gas resources in these basins, plus the Cooper, Bowen and Surat basins, occur in various 'unconventional' reservoirs (i.e. coal seam gas, shale gas and tight gas) and present a challenge to the CSG/petroleum industry, requiring both the development of appropriate technologies and lower costs. QFF recognises that with technology advancements and predicted future increases in energy prices, the existing tenures will be developed.

QFF requests that the 2016 report includes modelling for the cumulative ground water impacts associated with 40,000 gas wells across the existing tenure areas.

QFF welcomes the recognition within the report that there may be local effects resulting from poor construction or abandonment of CSG bores and wells; and that there will be continued assessment of the potential effects of abandoned or poorly constructed CSG wells using uncertainty analysis techniques.

³ Queensland Exploration Council. (2015). Queensland Exploration Scorecard: Tracking Queensland's Progress towards becoming an Exploration Leader by 2020.

⁴ In July 2014, DNRM introduced an 'Operational Policy – application for declaration of a Potential Commercial Area'. This policy applies to oil and gas explorers seeking Potential Commercial Areas (PCAs) under the P&G Act and provides them with guidance and clarity on PCA requirements

QFF requests that OGIA continue its work to develop and apply new methods for the analysis of uncertainty in regional groundwater-flow model outputs to include an assessment of the potential contribution of faults and abandoned or poorly constructed CSG bores.

QFF welcomes the opportunity to contribute to future discussions with OGIA on the associated life-span of various (CSG) bore remediation methods as well as the longer term (future generational) impacts and liability should the capping of these bores fail.

Thank you for the opportunity to provide comment on the Underground Water Impact Report for the Surat Cumulative Management Area, March 2016. If you would like to discuss any aspect of the QFF submission please contact Dr Georgina Davis on 3837 3727.

Yours sincerely,

Ruth Wade
Chief Executive Officer.