

Baseline assessment of water bores

QGC Pty Limited's Queensland Curtis LNG Project involves extracting significant volumes of gas from coal seams for domestic and export markets.

When extracting the gas, large amounts of water are also produced. Water production is expected to peak at between 150-190 megalitres per day in 2014, with an average production over the next 20 years of around 100 megalitres per day. QGC knows that water is a vital resource for communities and industries, including agriculture and mining, throughout the Surat Basin and Bowen Basin in Queensland.

We are committed to protecting the quality and quantity of groundwater resources in the region for all those who depend on them as we develop the Queensland Curtis LNG Project.

This fact sheet outlines QGC's approach to completing baseline assessments of all groundwater bores in and near coal seam gas tenures.

Baseline assessment of water bores

A water bore includes any groundwater bore that has an authorised use or purpose under the Queensland Government's *Water Act 2000*.

This includes water bores used for stock and domestic purposes that have not been formally registered or notified to the Department of Environment and Resource Management (DERM).

The *Water Act 2000* was recently amended to require coal seam gas companies, such as QGC, to do "baseline" assessments of all water bores within their tenures.

A baseline assessment gives us important information on the characteristics of the groundwater and the water bore before coal seam gas extraction begins.

This includes information on:

- water level, quality, bore depth and diameter
- type of construction, and
- type of pumping infrastructure and pumping details.

What the assessment involves

The assessment involves contacting all landholders within and nearby coal seam gas tenures about water bores on their properties. Landholders may be asked for basic information such as the number and location of bores on their property, limitations to access, the aquifer on which the bores draw and construction records or other data records e.g. driller's logs, bore depth, groundwater quality and level, pumping and supply records.

The next step involves QGC representatives scheduling a site visit to collect data from the bores and discuss the bore directly with the landholder.

During the baseline bore assessment, a water level meter will be used down the bore to measure the groundwater level. A PVC pipe may be used to prevent the meter from catching on pump equipment. To collect a static water level, QGC will ask the landholder to avoid pumping from the bore in the 48-to-96 hours before a site visit. Once the water level is measured, a water quality sample, representing the aquifer groundwater surrounding the bore casing construction is collected. The feasibility and arrangements for doing this assessment will be discussed with each landholder before the work begins.



Why we do a baseline assessment

The information collected in the baseline assessment establishes benchmark groundwater data prior to coal seam gas extraction.

The baseline assessment is done to:

- provide security for both bore owners and coal seam gas companies by giving an understanding of the characteristics of each water bore and regional aquifer located within a coal seam gas production area
- provide a reference point for comparing future bore assessments as part of ongoing monitoring
- assist in resolving issues between bore owners and petroleum tenure holders following a bore assessment or in the negotiation of a “make good” agreement.

Access to land and bore information

QGC is required under Queensland legislation to notify the owner of a water bore prior to doing a baseline assessment. This involves giving formal notice at least 10 business days prior to the assessment, stating when the assessment will be done and who will do it.

QGC will provide results from the assessment to the landholders and the Queensland Water Commission, an independent statutory authority.

Landholders are required by the *Water Act 2000* to co-operate with petroleum tenure holders on requests for information about bores. However, landholders are not expected to obtain the information at their own expense in order to comply with the request.

QGC will not pursue access to bores or information if a landholder does not authorise or agree to it. However, not participating in the baseline assessment program may reduce the ability to determine whether gas extraction has impacted on water supply in the future.



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About QGC

QGC is a leading Australian coal seam gas explorer and producer focused on developing world-class reserves in the Surat Basin and Bowen Basin for domestic and international supply.

Our headquarters are in Brisbane and we employ nearly 1000 people. In 2010, QGC produced about 20% of Queensland’s gas demand. QGC is wholly owned by BG Group, a leading oil and gas company with headquarters in the United Kingdom and operations in more than twenty-five countries.

Our commitments

We seek to minimise the effects of our operations on landholders and make a positive contribution to the protection of the environment.

We run our business in accordance with all government regulations, industry standards and the access rules that we agree with landholders.

Our staff, contractors and consultants follow QGC’s Code of Conduct, outlined in the ‘Information for Landholders’ booklet and available via our website: www.qgc.com.au

Contact details

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