

What if my bore was affected before the new laws come in?

The new groundwater laws will apply retrospectively, from the time when production commenced. If a bore is already affected, the responsible CSG producer will be required to restore supply or compensate the bore owner.

What if the water bore is affected by the operations of more than one producer?

Where the potential impacts of CSG operators' activities on groundwater may overlap a 'cumulative management area' will be established by government.

The Queensland Water Commission (QWC) will oversee CSG water impacts in cumulative management areas. Its role will include groundwater impact monitoring, groundwater modelling, and preparation of cumulative impact reports.

QWC will also assist in negotiations regarding 'make good' arrangements when more than one CSG operator is involved.

How do environmental management laws protect other environmental values like water, soil, vegetation, and wildlife?

Under Queensland laws, all CSG operators are subject to rigorous environmental assessment processes and must be issued an environmental authority (EA) from the Department of Environment and Resource Management (DERM) before they can commence operations.

Environmental assessments occur through specialised Environmental Impact Statement (EIS) processes for large scale or significant developments (such as large-scale coal seam gas fields, gas pipelines and LNG processing plants); and also as part of the assessment process for EA applications.

As part of this assessment process, new CSG activities are required to develop an environmental management plan. This plan identifies and manages potential impacts on the surrounding environment.

Under DERM's guidelines, Preparing an Environmental Management Plan for CSG Activities, CSG operators must consider:

- impacts on air quality
- CSG water management, treatment and disposal
- mapping and protection of remnant vegetation and other important areas of habitat for native wildlife
- nuisance noise impacts
- impacts on the local communities
- management and disposal of wastes.

Where potential risks or impacts are identified, conditions are included in the EA to ensure that the activity is properly managed to minimise environmental harm. The health of the surrounding environment is regularly monitored and reported to ensure the EA conditions are met.

DERM has developed a set of model environmental conditions for the stringent control of CSG activities. For example, the model conditions prohibit petroleum activities being conducted closer than 200 metres to national parks, and limit clearing of vegetation in other areas. They also limit the salinity of water that can be used for irrigation, in order to prevent soil damage.

DERM enforces these conditions with a compliance program consisting of inspections, audits and complaint response. The compliance program ensures CSG activities are performed at a high standard and that any problems are corrected as soon as possible.

Under the *Environmental Protection Act 1994*, DERM can prosecute CSG operators for serious breaches of operating standards and impose clean-up requirements.

Protecting your groundwater and the environment



Tomorrow's Queensland: strong, green, smart, healthy and fair

For further information, call the CSG/LNG hotline 13 25 23 or visit www.derm.qld.gov.au.

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 **Queensland**
Government

Queensland is seeing the development of a world-class liquefied natural gas (LNG) industry which has the potential to boost economic and social development in Queensland by creating thousands of new jobs and adding tens of billions of dollars to the state's economy.

The Queensland Government will apply existing and new legislation to ensure the economically important activity of coal seam gas (CSG) extraction is environmentally sustainable by protecting our environmental and natural resources.

Many CSG extraction sites are located on land used for cropping and grazing—industries dependent on access to adequate water supplies. It is important that the impacts of CSG extraction on good quality groundwater supplies are minimised and that landholders have greater certainty about how their rights will be protected.



Your questions answered

What is the government doing to protect groundwater supplies for landholders accessed by the CSG industry?

The government is implementing a tough new regulatory regime to ensure CSG operators comply with best practice to ensure that agricultural land remains productive for primary industries.

Amendments to the *Environmental Protection Act 1994* will require CSG operators to submit environmental management plans to demonstrate their effective protection of environmental values, including groundwater quality.

Amendments to the *Water Act 2000* will support management and protection of water resources, by requiring CSG operators to prepare periodic underground water impact reports.

Through forthcoming amendments to the *Water Act 2000*, the government will introduce groundwater trigger thresholds for impacts on private bores affected by CSG extraction activities.

What are the new groundwater trigger thresholds?

A trigger threshold is the drop in water level in a bore that may cause a material impact on the water supply from that bore. A decline in water level in a bore exceeding the trigger level may impact on the ability of the bore to supply water at a rate suitable for the bore's designed purpose.

The trigger threshold values for impacts on bores will be:

- a five metre drop for consolidated aquifers such as sandstone
- a two metre drop for shallow alluvial aquifers.

The trigger threshold value for springs will be a 0.2 metre drop.

What happens when a trigger threshold is reached?

If a bore owner believes CSG water extraction has caused a decline in their bore water levels in excess of the trigger value, and that this decline has reduced a bore's capacity to supply water for the intended purpose, the bore owner will have the right to have the CSG producer investigate.

The bore owner will need to provide the CSG producer with basic information (e.g. bore location, registration number, water levels and water use records, if available) on the reduction of water supply and the construction of the bore.

If the reduction is found to have been caused by CSG operations, the CSG producer will be obliged to negotiate 'make good' arrangements with the bore owner, under the 'make good' provisions of the new regulations.

What are 'make good' arrangements?

'Make good' arrangements are arrangements agreed between a landholder and a CSG operator for the restoration of groundwater bore performance, or any other measures acceptable to the landholder, in response to the reduction in bore supply found to have been caused by CSG activities.

Make good arrangements could include measures such as: deepening a groundwater bore, providing access to a groundwater water pump, or establishing an alternative source of water supply.

What if a bore owner is unable to reach agreement with a CSG producer about compensation?

When 'make good' arrangements cannot be negotiated, the bore owner will be able to lodge an appeal and have the matter resolved in the Land Court.