



## Groundwater development in Mulgildie Basin

This fact sheet outlines the new requirements for groundwater related development and the take of groundwater in the Mulgildie Basin area.

The Mulgildie Basin is a small extension of the Great Artesian Basin (GAB) in the Burnett region, encompassing Monto, Mundubbera and Eidsvold. The main groundwater resources within the Mulgildie Basin are:

- subartesian alluvial groundwater supplies from the Mulgildie and Monto subartesian areas; and
- subartesian and artesian groundwater supplies from the GAB within the Hutton Sandstone, Evergreen Formation and Precipice Sandstone.

The generalised cross section below shows the occurrence of these groundwater resources in the area.

### Background

A moratorium on drilling water bores and processing applications to take groundwater in the Mulgildie Basin and Monto subartesian area was announced on 31 March 2005.

The moratorium was required to maintain the status quo with respect to groundwater use and development while management arrangements were established to protect existing users and groundwater dependent ecosystems in the Mulgildie Basin.

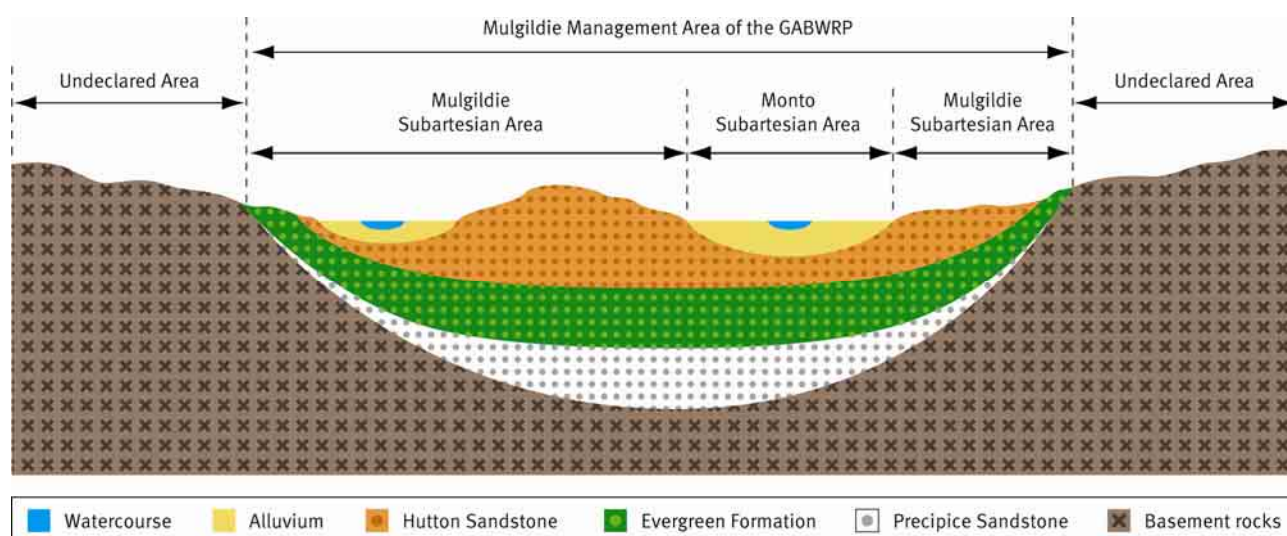
Management arrangements are now established under the Great Artesian Basin Water Resource Plan (GAB WRP) and the declared Mulgildie and Monto subartesian areas. Maps showing the area covered are available on the NRW website. The moratorium was lifted on 1 February 2007.

### Requirements for a new bore

Authorisations, such as a water licence or a development permit, may be needed for a new water bore in the Mulgildie Basin. In the GAB, approval of the construction of a new water bore for purposes other than stock and domestic will only be given where the take of water meets the requirements of the GAB WRP.

### Authorisations to take water

An authorisation to take water may be required depending on the aquifer being tapped. The table on the next page outlines when an authorisation will be needed.





Water	Authorisation required for
GAB artesian	All purposes
GAB subartesian	Non stock and domestic purposes
Monto subartesian area - non GAB aquifers	Non stock and domestic purposes
Mulgildie subartesian area - non GAB aquifers	Not required for any purpose

The GAB WRP does not allow for new water licences in the Mulgildie Basin. It does allow for new stock and domestic water bores, without the need for a water licence. Temporary activities such as taking water from a GAB water bore for road construction can be authorised through a water permit.

### Water bore construction (Works)

All artesian water bores in the GAB WRP area require a development permit.

New works for taking subartesian water for stock and domestic purposes from the GAB are self-assessable development. Although these works do not need a development permit, they do need to be constructed in accordance with the "Code for self-assessable development of bores identified in a water resource plan as self-assessable". The code is available on the NRW website or from your local NRW office.

For the construction of all artesian replacement water bores, landholders will need to apply for a development permit.

Under the GAB WRP, a water bore replacing an existing subartesian GAB water bore that has a development permit, is classed as self-assessable development. A development permit is not required for these types of replacement water bores, provided the water bore is constructed in accordance with the "Code for self-assessable development of replacement bores". The code is available on the NRW website or from your local NRW office.

A replacement water bore is one that is constructed within 10 metres of an existing water bore, to a depth no greater than the original water bore and with a casing diameter no greater than the original water bore.

For subartesian GAB replacement water bores where the existing water bore does not have a development permit, having been constructed at a time when development permits were not required, the landholder will need to apply for a development permit.

The table below outlines when a development permit will be required for different water bore types in the Mulgildie Basin.

Water Bore type	Development Permit or self-assessable?
All artesian water bores	Development permit
Subartesian non stock or domestic water bores - all aquifers	Development permit
Subartesian non-GAB stock or domestic water bores	No development permit required, no self-assessment required
Subartesian GAB stock or domestic water bores	Self-assessable
Water bore to replace a subartesian GAB water bore which has no development permit	Development permit
Water bore to replace a subartesian GAB water bore which has a development permit	Self-assessable if it complies with the code, otherwise a development permit is needed

### Is a licensed water bore driller required?

It is a requirement that licensed water bore drillers are used when constructing, rehabilitating or decommissioning water bores in Queensland.

To minimise the risk of contamination of the groundwater resource the water bore drillers licensing arrangements under the Water Act 2000 aim to ensure that all water bore drillers comply with minimum construction standards.

Three classes of licensed water bore drillers exist in Queensland:

- Class 1 - water bore drillers licence permits work in non-flowing (subartesian) single aquifer systems and are not allowed to drill through the upper aquifer formation to tap deeper formations.
- Class 2 - in addition to Class 1, Class 2 drillers licences allow work in non-flowing (subartesian) multiple aquifer systems.
- Class 3 - water bore drillers licence allows work in non-flowing and flowing (artesian) multiple aquifer systems.

A public register of licensed water bore drillers is available on the NRW website.



## Further information

For further information on bore construction requirements in the Mulgildie Basin visit the NRW website <[www.nrw.qld.gov.au](http://www.nrw.qld.gov.au)> or contact your local NRW office.

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*For further information phone 13 13 04*