



The Great Artesian Basin Sustainability Initiative—bore rehabilitation

The Great Artesian Basin Sustainability Initiative (GABSI) provides funding for approved projects that focus on bore rehabilitation and the replacement of bore drains with piped reticulation systems. This fact sheet describes the options available for bore rehabilitation.

Before any rehabilitation of bores is undertaken, the bores must be geophysically logged to investigate the condition of the bore and to determine the most cost-effective method of rehabilitation.

Geophysical logging

Logging involves assessing the overall condition of the bore and the hydrogeological structures the bore intersects. Some of the main features investigated with geophysical logging include:

- condition of casing and joins
- location of water bearing aquifers and other strata
- build up of deposits such as scaling and rust
- location and identification of leakage
- location of casing slots which allow water to enter the bore
- the length of time taken to log a bore depends on the bore depth, the number of tools run, any damage to the bore and the amount of access required. On average, it usually takes one day.

Eligibility

Bores eligible to apply for rehabilitation include:

- Uncontrolled bores drilled prior to 1954
and/or
- Bores located in a departmentally defined corrosive zone that have become uncontrolled due to the corrosive nature of the water.

Methods of bore rehabilitation

Bores are rehabilitated based on the most cost-effective method, which is determined by the Department of Natural Resources and Water (NRW) in consultation with the landholder.

Reline

Relining a bore involves running smaller diameter casing inside the existing casing of an uncontrolled bore. The space between the two strings of casing is cemented and allows full control of the bore. This method is often the most cost-effective for deep bores in reasonable condition, where minimum construction standards with respect to annular thickness can be met. However, due to the smaller diameter, there is usually a reduced flow from the bore.

Redrill and plug

This method involves drilling a new bore near the old bore and plugging the old bore with cement grout. The new bore may be constructed using steel or inert casing and cemented between the casing strings to add further protection to the bore.

Repairs

In order to determine the suitability of a bore to be repaired a physical investigation of the bore is required. Repairs may include replacing casing near the surface, cementing between strings of casing or fitting new headworks to bores that are found to be in a suitable condition.

Financial considerations

Where the total cost of rehabilitation is less than \$5000, landholders are required to meet the first \$1000 of costs.

If the total cost of rehabilitation exceeds \$5000, landholders are required to meet 20 per cent of costs. Note that the cost of a new bore includes any cost resulting from investigation and plugging the old bore, and any property plan required by NRW to facilitate planning of the Initiative.

An 'up front' deposit equal to one half of the estimated monetary contribution for materials plus the cost of any unsubsidised works is required before rehabilitation commences.

Further financial assistance may be available through various other agencies including Queensland Rural Adjustment Authority and the Australian Tax Office.



For more information on financial assistance, contact the
GABSI offices in Charleville (07) 4654 4252 or
Toowoomba (07) 4688 1308.

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For further information phone 13 13 04